

Pantheon Report

Generated at 2018-02-28 19:43:02 (UTC).

Data path: GCE London Ethernet (*local*) → GCE Tokyo Ethernet (*remote*).

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

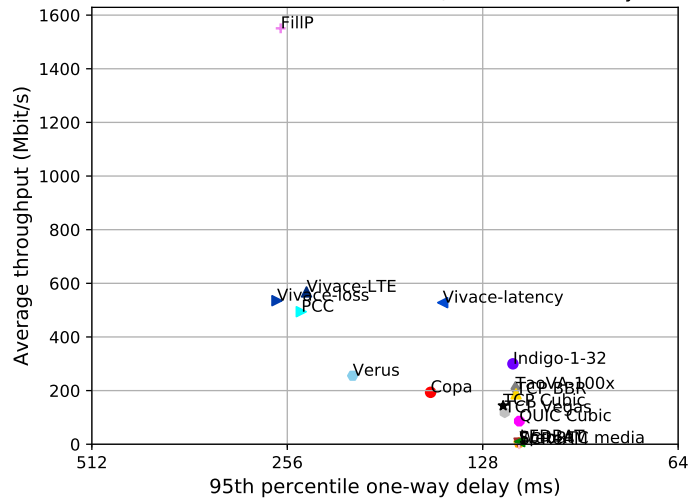
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (*fq*), and other schemes with the default Linux qdisc (*pfifo_fast*).

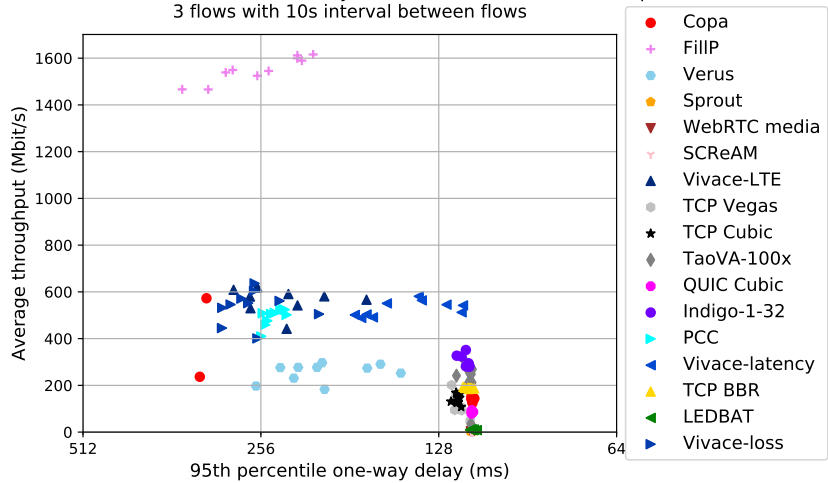
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE London Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE London Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



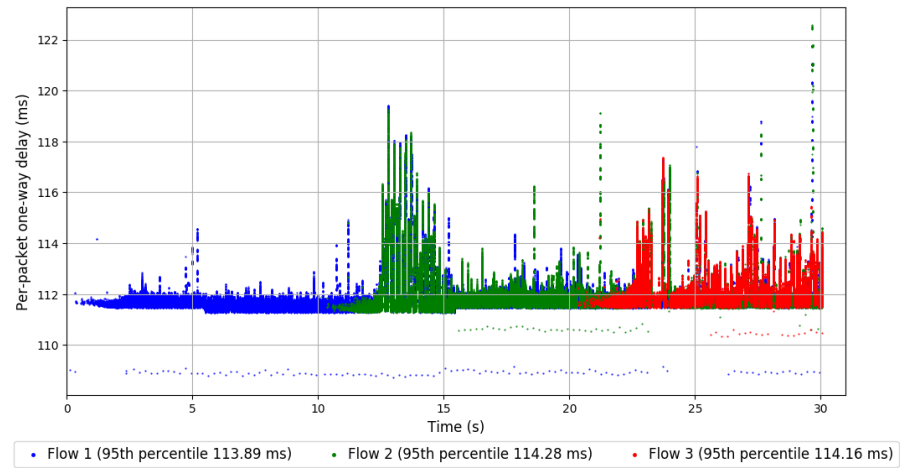
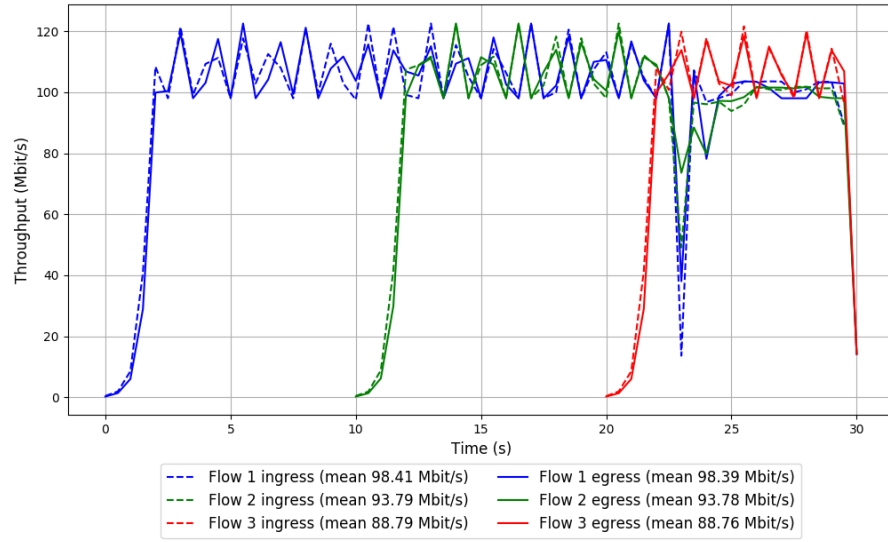
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	96.07	94.55	87.76	112.88	113.77	115.33	0.01	0.02	0.00
TCP Cubic	10	80.54	65.56	59.19	118.87	119.14	118.79	0.00	0.01	0.07
LEDBAT	10	6.83	3.47	2.07	112.35	112.07	111.53	0.00	0.00	0.00
PCC	10	461.94	45.58	11.13	243.59	243.48	230.09	2.24	1.59	1.43
QUIC Cubic	10	47.21	43.67	31.19	111.91	111.55	112.26	0.00	0.00	0.01
SCReAM	10	0.21	0.21	0.22	111.67	112.03	111.62	0.01	0.00	0.00
WebRTC media	10	2.11	1.31	0.49	112.20	111.94	111.89	0.00	0.01	0.02
Sprout	10	2.79	2.81	2.08	112.82	112.46	112.44	0.00	0.00	0.00
TaoVA-100x	10	124.32	81.27	101.12	113.28	113.40	115.72	0.00	0.00	0.01
TCP Vegas	10	61.23	59.28	54.44	117.18	117.31	118.02	0.00	0.02	0.22
Verus	10	167.07	107.05	55.44	197.94	194.24	224.76	0.27	0.32	2.06
Copa	10	118.92	103.23	54.15	153.94	131.08	125.63	6.47	2.32	1.13
FillP	10	825.45	762.79	658.64	250.21	239.10	258.77	5.43	7.88	10.07
Indigo-1-32	10	153.87	156.28	132.28	114.23	115.81	115.61	0.00	0.01	0.00
Vivace-latency	10	311.35	261.79	129.59	153.43	130.66	161.12	0.26	0.00	1.82
Vivace-loss	10	285.87	287.00	179.48	250.23	246.22	269.05	2.75	1.95	6.52
Vivace-LTE	10	344.59	255.16	163.63	227.71	205.70	197.45	0.66	0.85	1.27

```
Run 1: Statistics of TCP BBR

Start at: 2018-02-28 12:31:57
End at: 2018-02-28 12:32:27

# Below is generated by plot.py at 2018-02-28 17:46:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 190.30 Mbit/s
95th percentile per-packet one-way delay: 114.097 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 98.39 Mbit/s
95th percentile per-packet one-way delay: 113.892 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 93.78 Mbit/s
95th percentile per-packet one-way delay: 114.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 88.76 Mbit/s
95th percentile per-packet one-way delay: 114.157 ms
Loss rate: 0.02%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-28 12:51:21

End at: 2018-02-28 12:51:51

Below is generated by plot.py at 2018-02-28 17:46:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.08 Mbit/s

95th percentile per-packet one-way delay: 113.251 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 94.12 Mbit/s

95th percentile per-packet one-way delay: 112.810 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.74 Mbit/s

95th percentile per-packet one-way delay: 113.311 ms

Loss rate: 0.05%

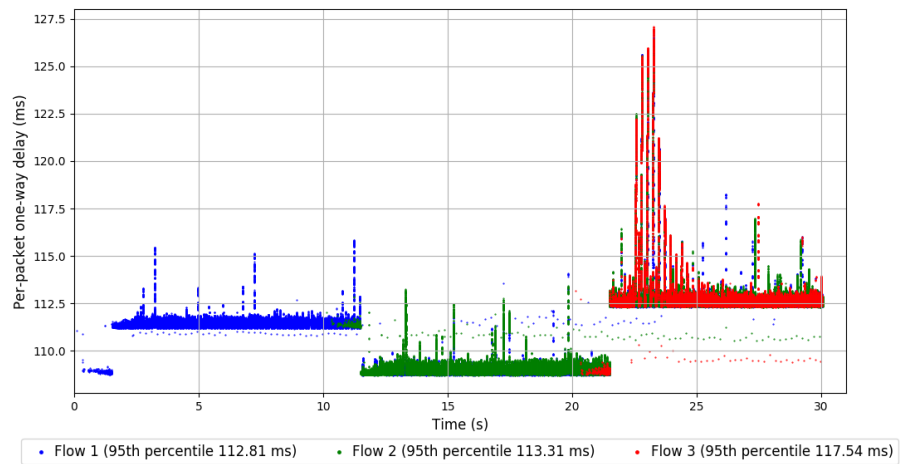
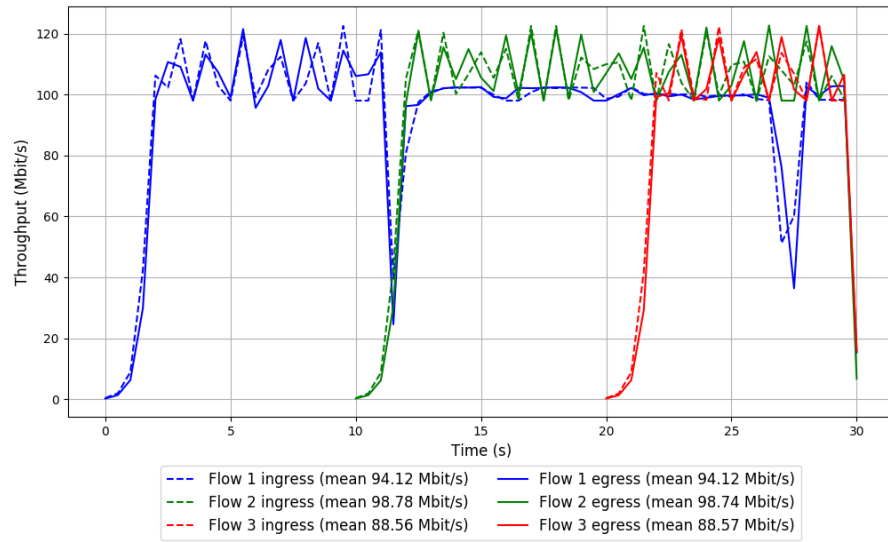
-- Flow 3:

Average throughput: 88.57 Mbit/s

95th percentile per-packet one-way delay: 117.542 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-28 13:11:19

End at: 2018-02-28 13:11:49

Below is generated by plot.py at 2018-02-28 17:46:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.86 Mbit/s

95th percentile per-packet one-way delay: 115.527 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 97.91 Mbit/s

95th percentile per-packet one-way delay: 114.915 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 93.44 Mbit/s

95th percentile per-packet one-way delay: 116.073 ms

Loss rate: 0.01%

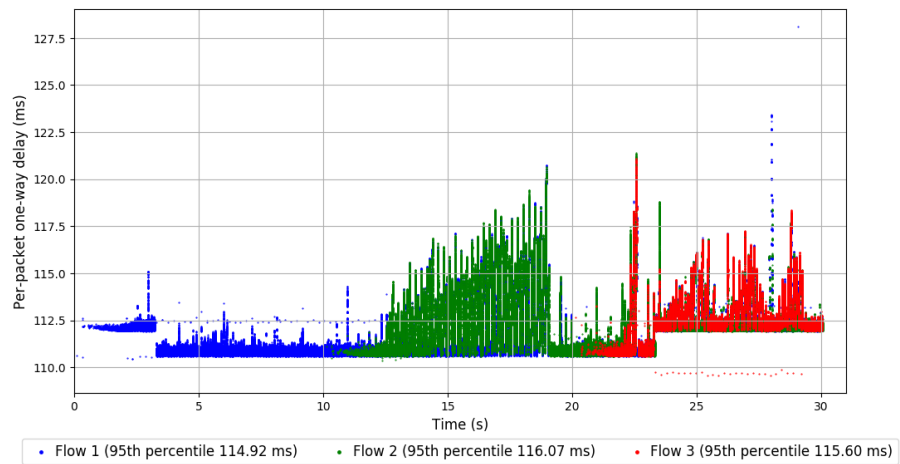
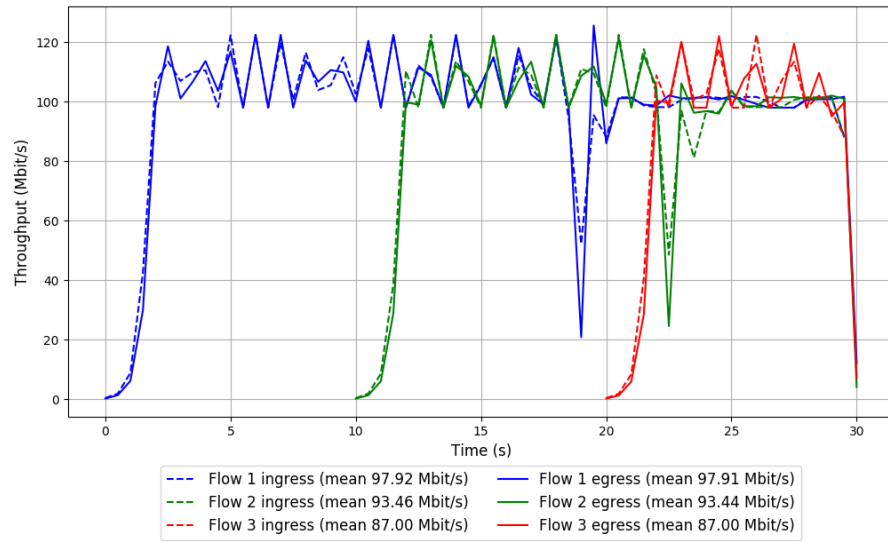
-- Flow 3:

Average throughput: 87.00 Mbit/s

95th percentile per-packet one-way delay: 115.603 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-28 13:31:01

End at: 2018-02-28 13:31:31

Below is generated by plot.py at 2018-02-28 17:46:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.36 Mbit/s

95th percentile per-packet one-way delay: 116.285 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.82 Mbit/s

95th percentile per-packet one-way delay: 113.311 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.80 Mbit/s

95th percentile per-packet one-way delay: 116.808 ms

Loss rate: 0.00%

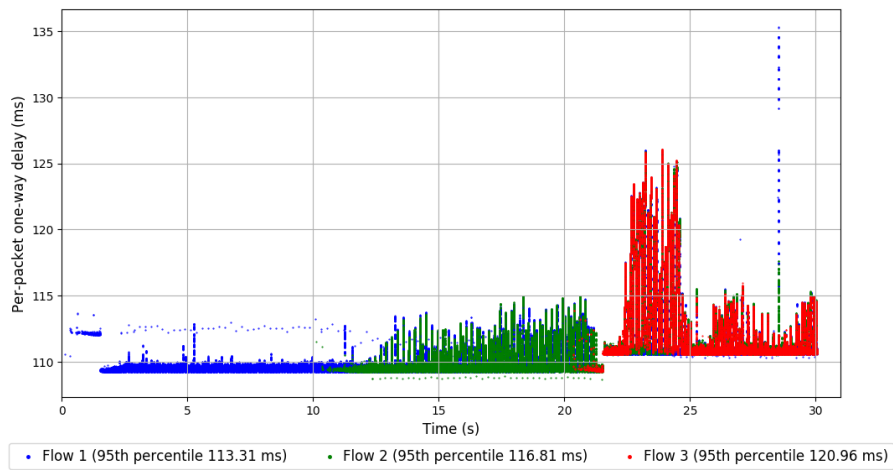
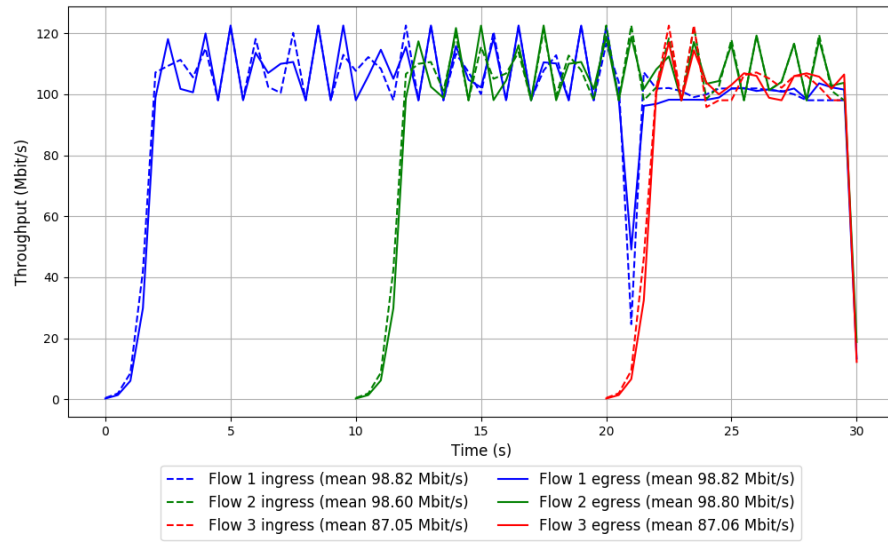
-- Flow 3:

Average throughput: 87.06 Mbit/s

95th percentile per-packet one-way delay: 120.962 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-28 13:50:56

End at: 2018-02-28 13:51:26

Below is generated by plot.py at 2018-02-28 17:46:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.06 Mbit/s

95th percentile per-packet one-way delay: 113.970 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.83 Mbit/s

95th percentile per-packet one-way delay: 112.728 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.62 Mbit/s

95th percentile per-packet one-way delay: 113.645 ms

Loss rate: 0.00%

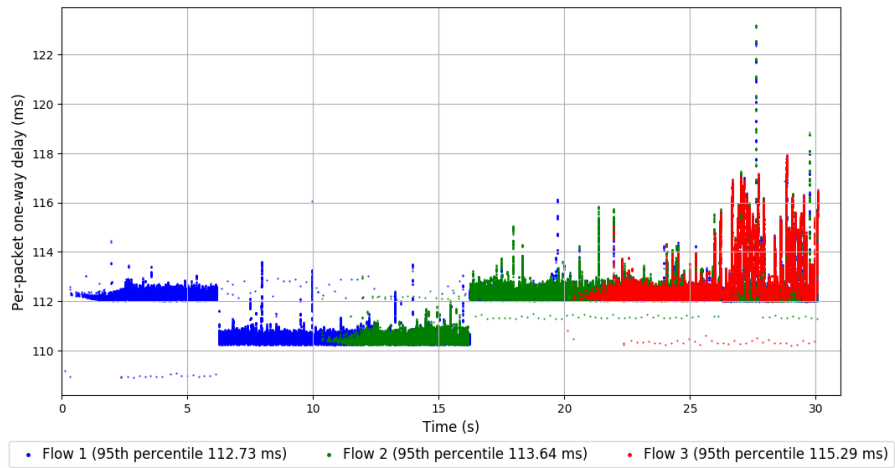
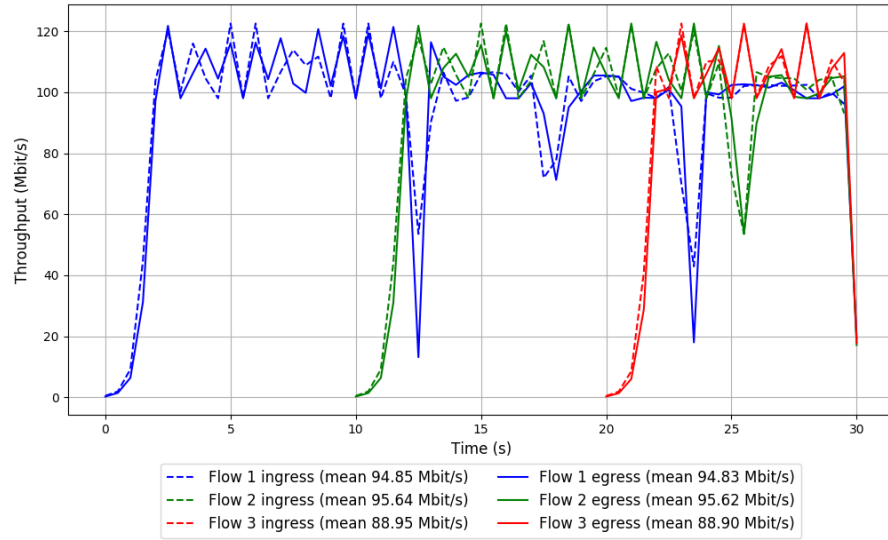
-- Flow 3:

Average throughput: 88.90 Mbit/s

95th percentile per-packet one-way delay: 115.287 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-28 14:10:47

End at: 2018-02-28 14:11:17

Below is generated by plot.py at 2018-02-28 17:46:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.93 Mbit/s

95th percentile per-packet one-way delay: 112.732 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.64 Mbit/s

95th percentile per-packet one-way delay: 112.489 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.63 Mbit/s

95th percentile per-packet one-way delay: 112.580 ms

Loss rate: 0.00%

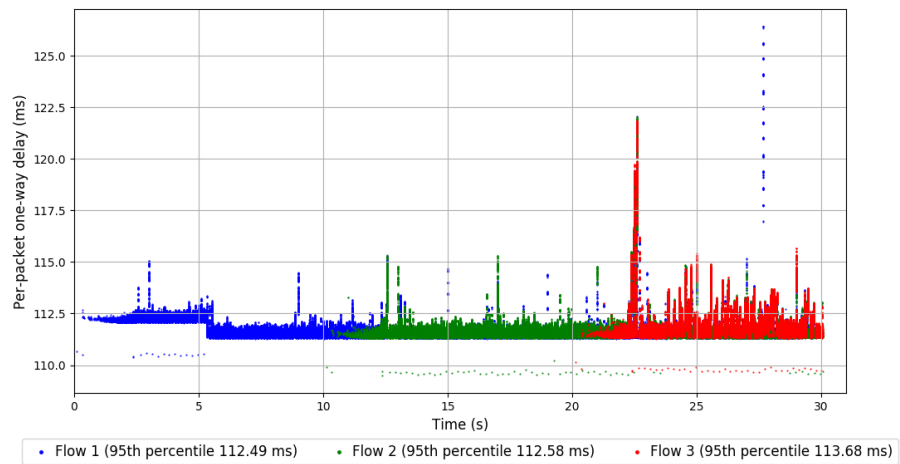
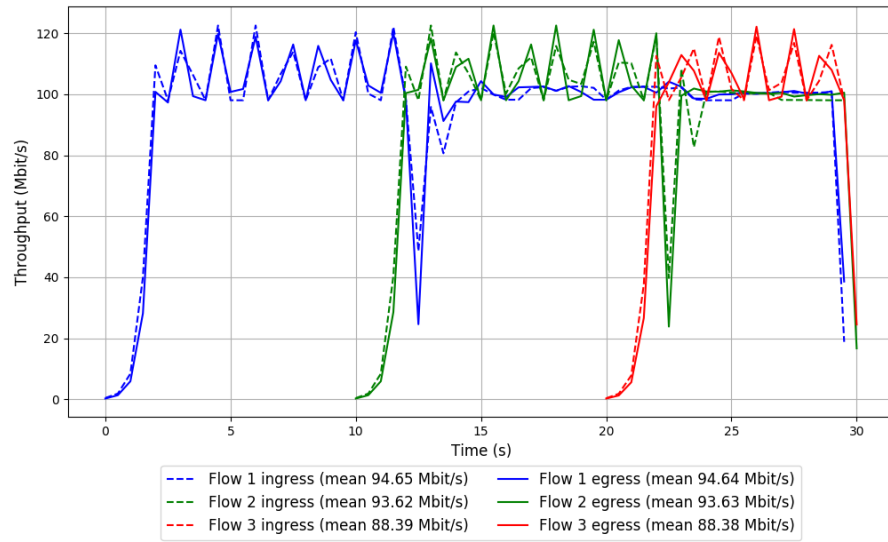
-- Flow 3:

Average throughput: 88.38 Mbit/s

95th percentile per-packet one-way delay: 113.676 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-28 14:30:42

End at: 2018-02-28 14:31:12

Below is generated by plot.py at 2018-02-28 17:46:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.23 Mbit/s

95th percentile per-packet one-way delay: 113.519 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 96.24 Mbit/s

95th percentile per-packet one-way delay: 112.292 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 89.72 Mbit/s

95th percentile per-packet one-way delay: 113.008 ms

Loss rate: 0.18%

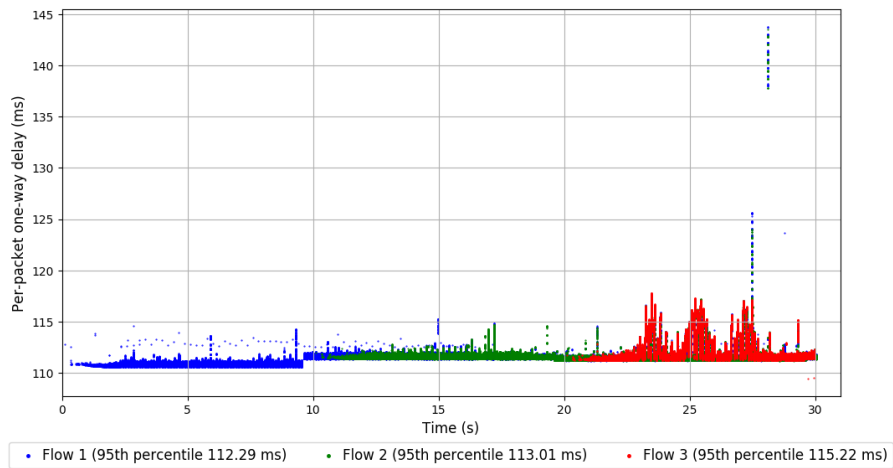
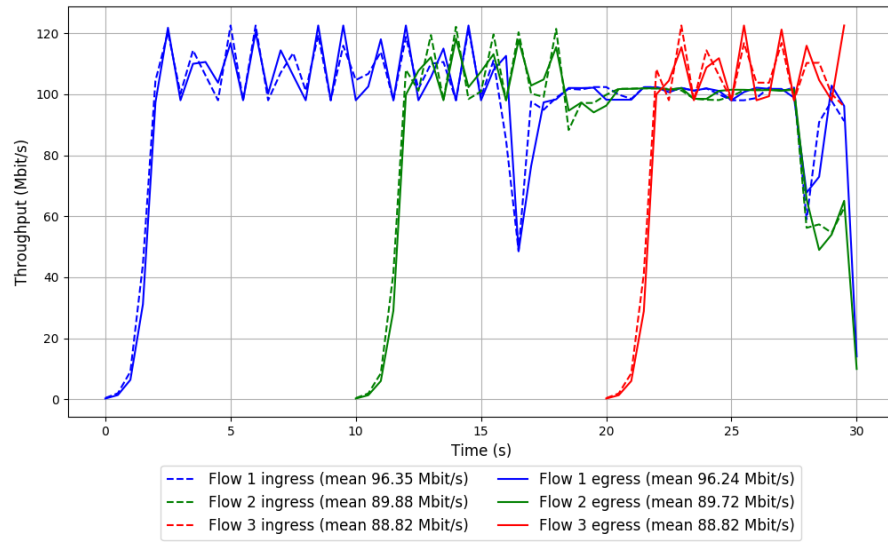
-- Flow 3:

Average throughput: 88.82 Mbit/s

95th percentile per-packet one-way delay: 115.221 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-28 14:50:34

End at: 2018-02-28 14:51:04

Below is generated by plot.py at 2018-02-28 17:46:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.63 Mbit/s

95th percentile per-packet one-way delay: 113.847 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.09 Mbit/s

95th percentile per-packet one-way delay: 113.239 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.82 Mbit/s

95th percentile per-packet one-way delay: 113.621 ms

Loss rate: 0.00%

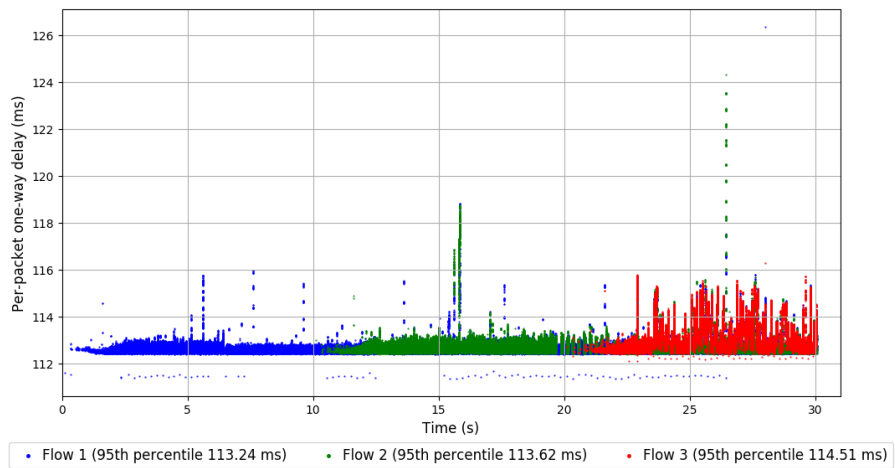
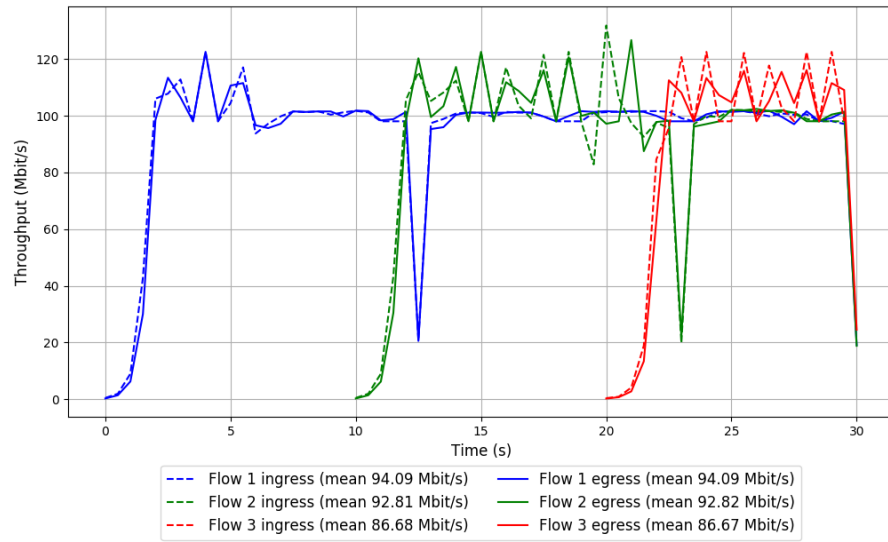
-- Flow 3:

Average throughput: 86.67 Mbit/s

95th percentile per-packet one-way delay: 114.513 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-28 15:10:47

End at: 2018-02-28 15:11:17

Below is generated by plot.py at 2018-02-28 17:49:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.09 Mbit/s

95th percentile per-packet one-way delay: 111.523 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.54 Mbit/s

95th percentile per-packet one-way delay: 111.108 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.04 Mbit/s

95th percentile per-packet one-way delay: 111.532 ms

Loss rate: 0.00%

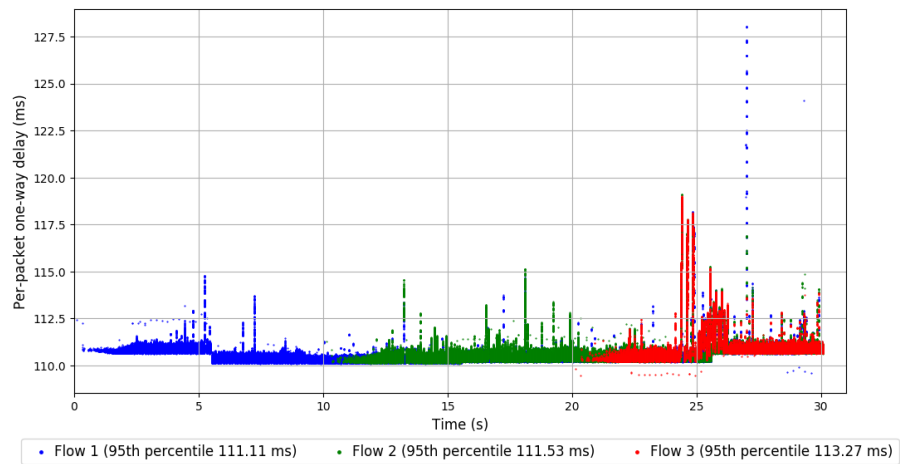
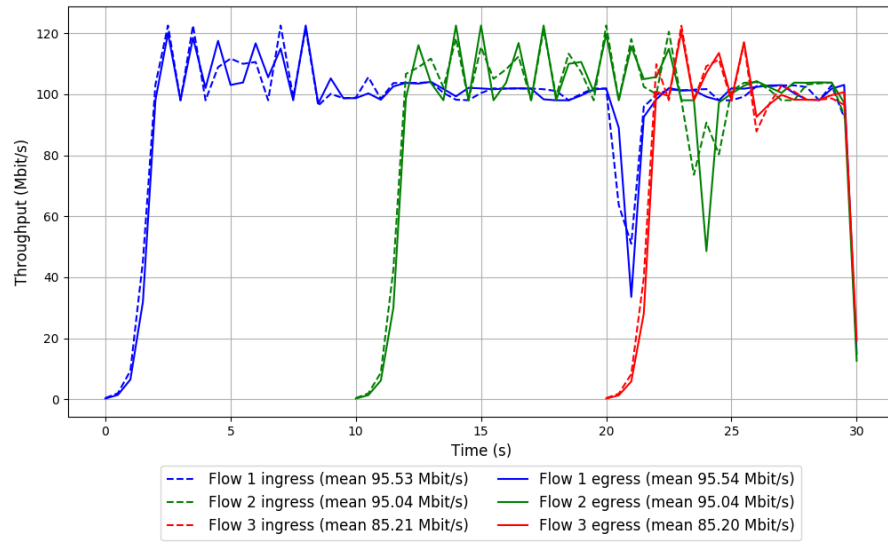
-- Flow 3:

Average throughput: 85.20 Mbit/s

95th percentile per-packet one-way delay: 113.267 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-28 15:30:51

End at: 2018-02-28 15:31:21

Below is generated by plot.py at 2018-02-28 17:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.91 Mbit/s

95th percentile per-packet one-way delay: 112.573 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 96.12 Mbit/s

95th percentile per-packet one-way delay: 112.016 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 112.818 ms

Loss rate: 0.00%

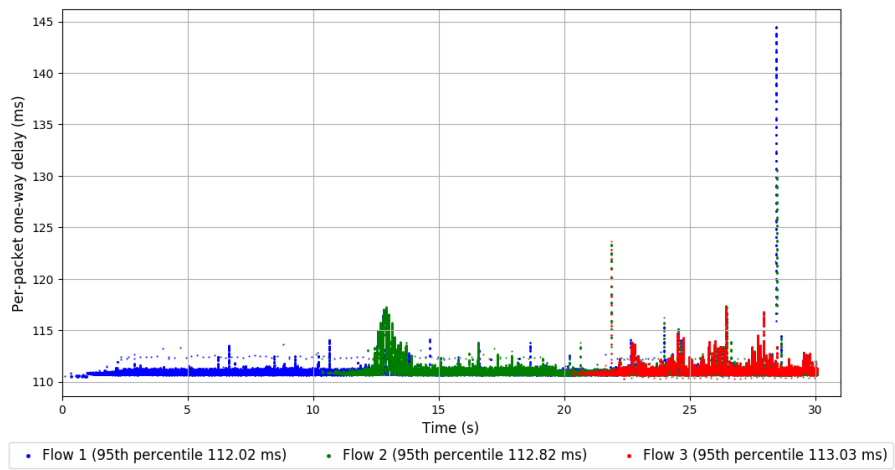
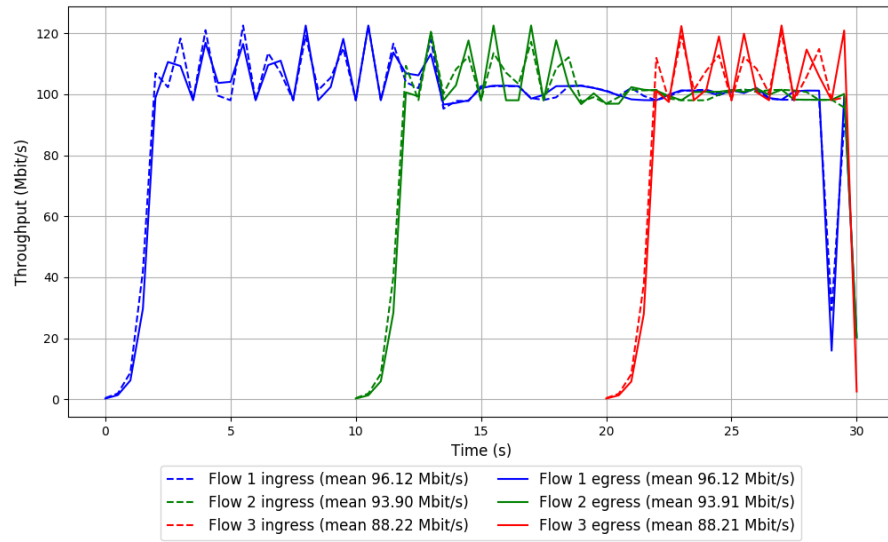
-- Flow 3:

Average throughput: 88.21 Mbit/s

95th percentile per-packet one-way delay: 113.029 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-28 12:19:12

End at: 2018-02-28 12:19:42

Below is generated by plot.py at 2018-02-28 17:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.51 Mbit/s

95th percentile per-packet one-way delay: 118.527 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 94.07 Mbit/s

95th percentile per-packet one-way delay: 118.296 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 57.90 Mbit/s

95th percentile per-packet one-way delay: 118.768 ms

Loss rate: 0.04%

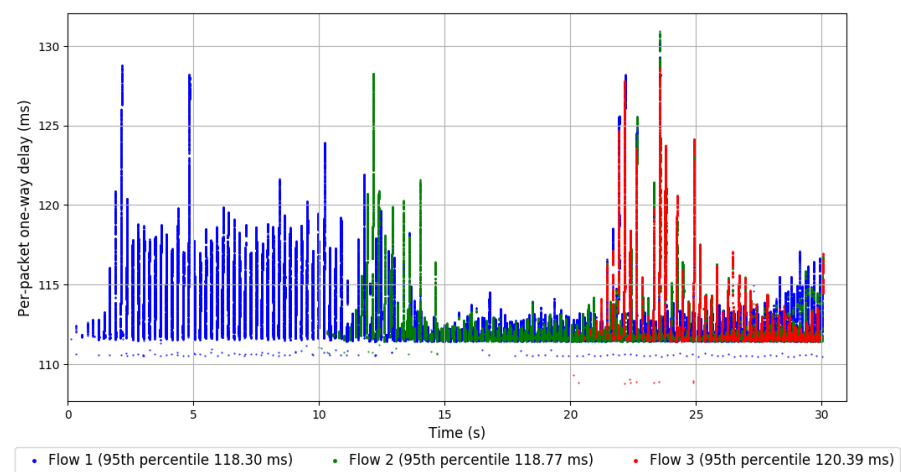
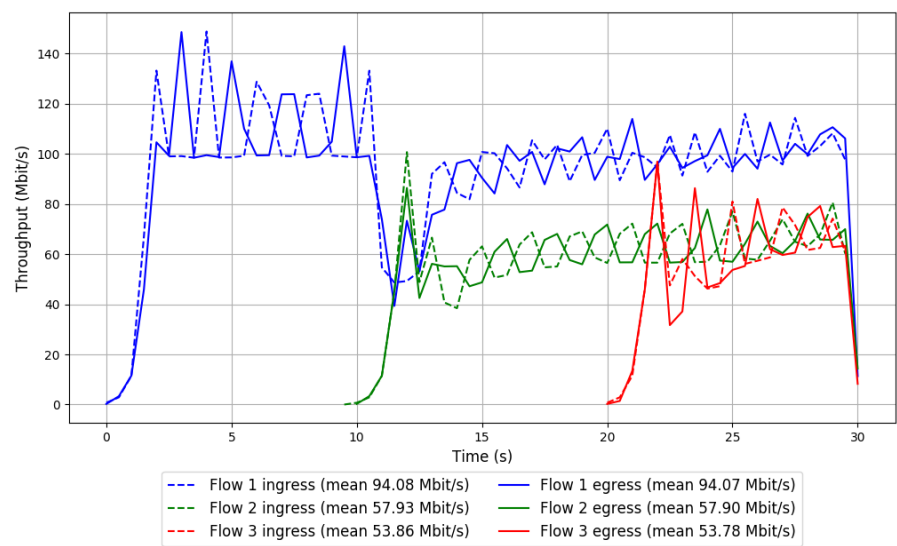
-- Flow 3:

Average throughput: 53.78 Mbit/s

95th percentile per-packet one-way delay: 120.387 ms

Loss rate: 0.12%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-28 12:39:00

End at: 2018-02-28 12:39:30

Below is generated by plot.py at 2018-02-28 17:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.74 Mbit/s

95th percentile per-packet one-way delay: 118.092 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.71 Mbit/s

95th percentile per-packet one-way delay: 117.573 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.80 Mbit/s

95th percentile per-packet one-way delay: 119.041 ms

Loss rate: 0.00%

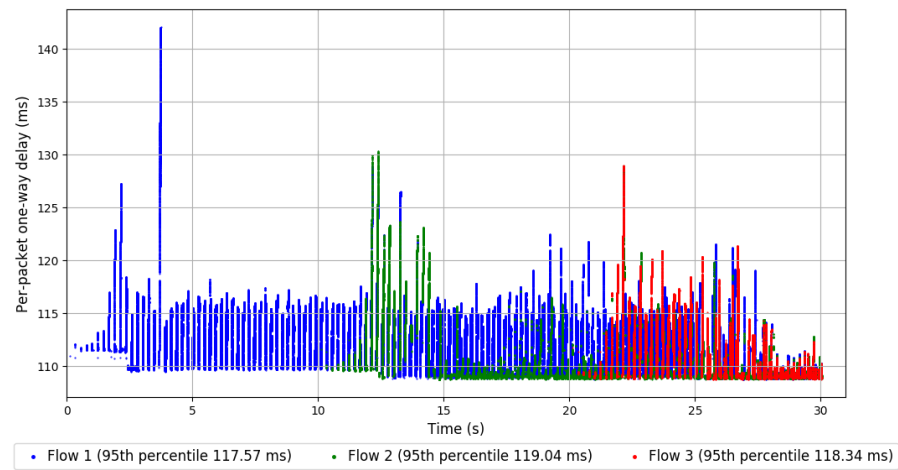
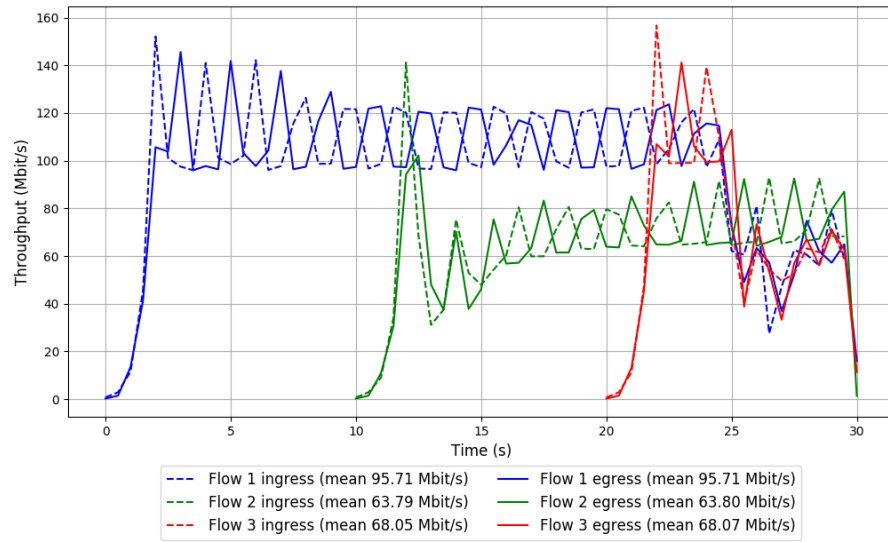
-- Flow 3:

Average throughput: 68.07 Mbit/s

95th percentile per-packet one-way delay: 118.340 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-28 12:58:30

End at: 2018-02-28 12:59:00

Below is generated by plot.py at 2018-02-28 17:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.75 Mbit/s

95th percentile per-packet one-way delay: 118.021 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.78 Mbit/s

95th percentile per-packet one-way delay: 118.177 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.57 Mbit/s

95th percentile per-packet one-way delay: 118.141 ms

Loss rate: 0.00%

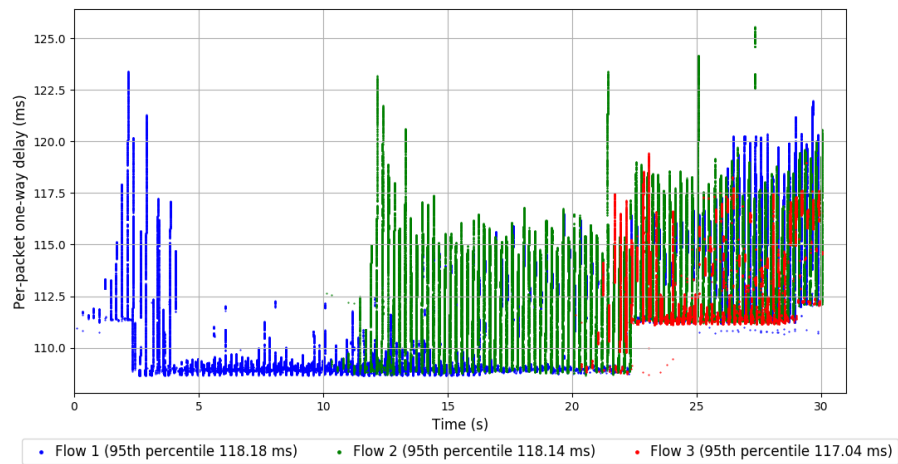
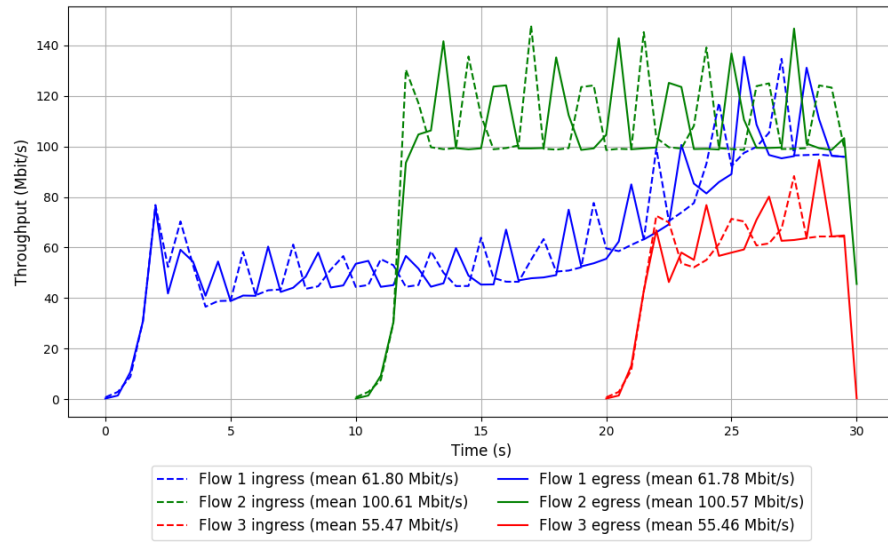
-- Flow 3:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 117.039 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-28 13:18:13

End at: 2018-02-28 13:18:43

Below is generated by plot.py at 2018-02-28 17:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.64 Mbit/s

95th percentile per-packet one-way delay: 122.064 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.99 Mbit/s

95th percentile per-packet one-way delay: 121.226 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.29 Mbit/s

95th percentile per-packet one-way delay: 122.364 ms

Loss rate: 0.00%

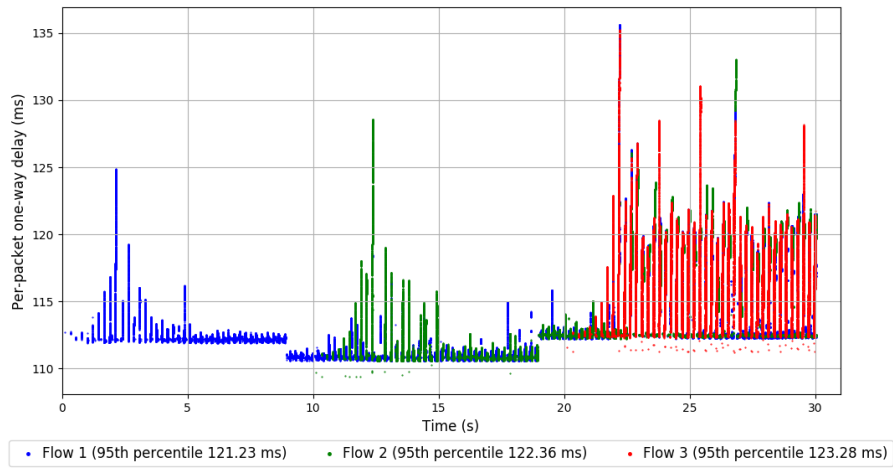
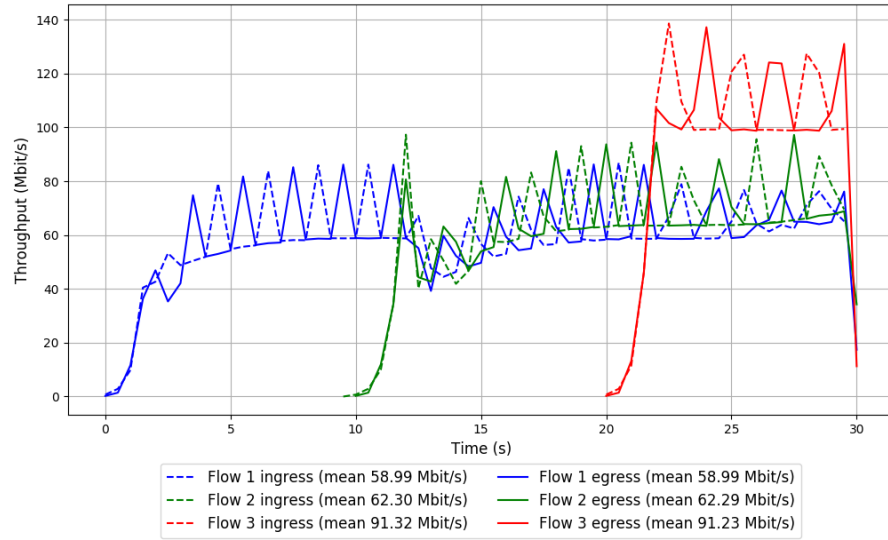
-- Flow 3:

Average throughput: 91.23 Mbit/s

95th percentile per-packet one-way delay: 123.281 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-28 13:38:03

End at: 2018-02-28 13:38:33

Below is generated by plot.py at 2018-02-28 17:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.31 Mbit/s

95th percentile per-packet one-way delay: 118.751 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.07 Mbit/s

95th percentile per-packet one-way delay: 119.011 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.15 Mbit/s

95th percentile per-packet one-way delay: 116.989 ms

Loss rate: 0.00%

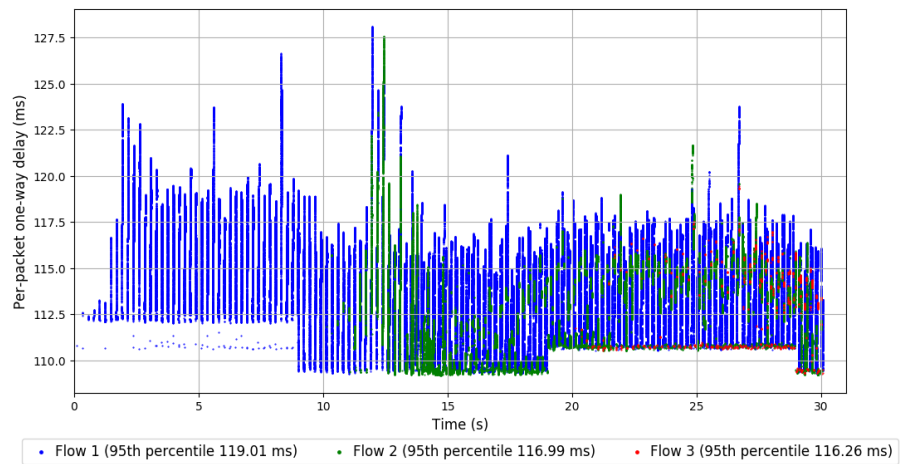
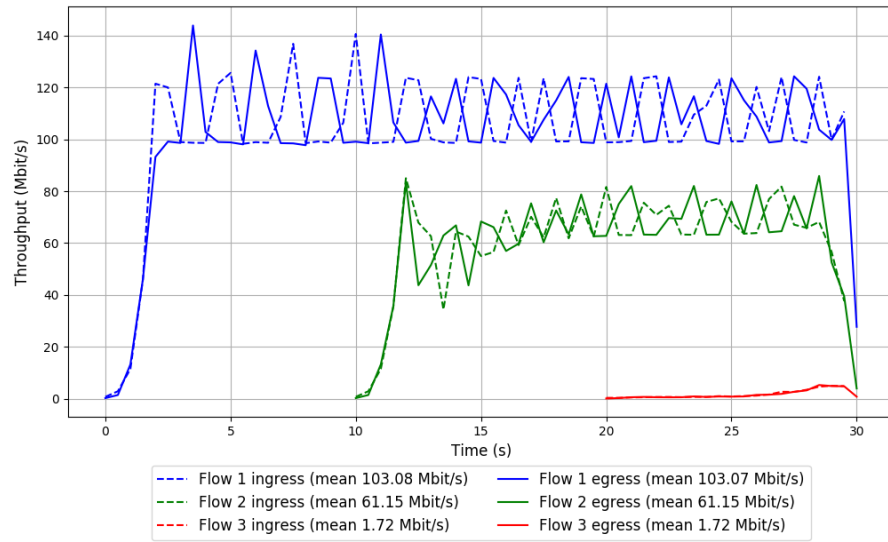
-- Flow 3:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 116.256 ms

Loss rate: 0.49%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-28 13:58:02

End at: 2018-02-28 13:58:32

Below is generated by plot.py at 2018-02-28 17:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.62 Mbit/s

95th percentile per-packet one-way delay: 119.518 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.41 Mbit/s

95th percentile per-packet one-way delay: 119.321 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.21 Mbit/s

95th percentile per-packet one-way delay: 119.992 ms

Loss rate: 0.00%

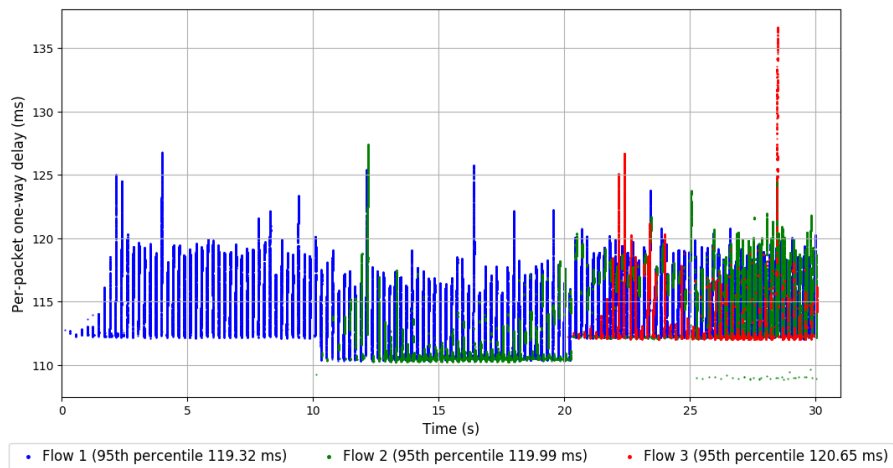
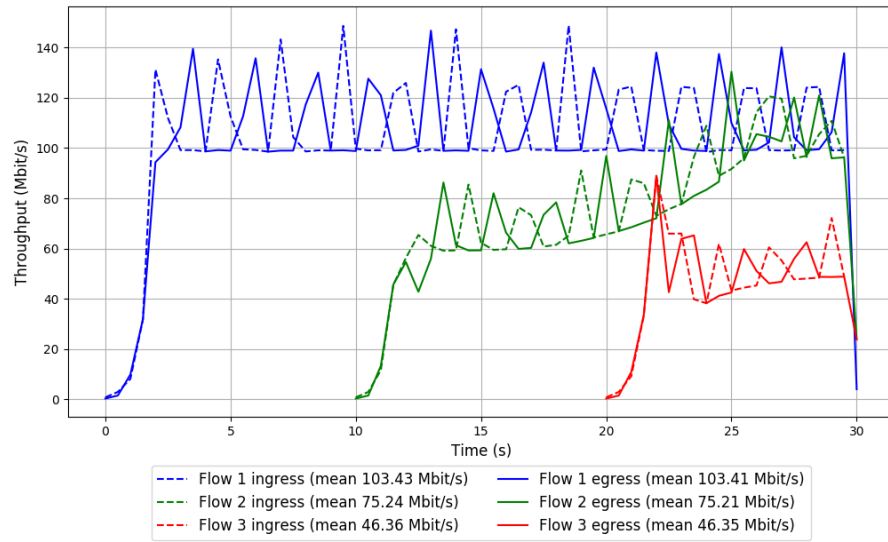
-- Flow 3:

Average throughput: 46.35 Mbit/s

95th percentile per-packet one-way delay: 120.649 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-28 14:17:56

End at: 2018-02-28 14:18:26

Below is generated by plot.py at 2018-02-28 17:50:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.91 Mbit/s

95th percentile per-packet one-way delay: 119.293 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 82.06 Mbit/s

95th percentile per-packet one-way delay: 119.391 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.03 Mbit/s

95th percentile per-packet one-way delay: 119.529 ms

Loss rate: 0.03%

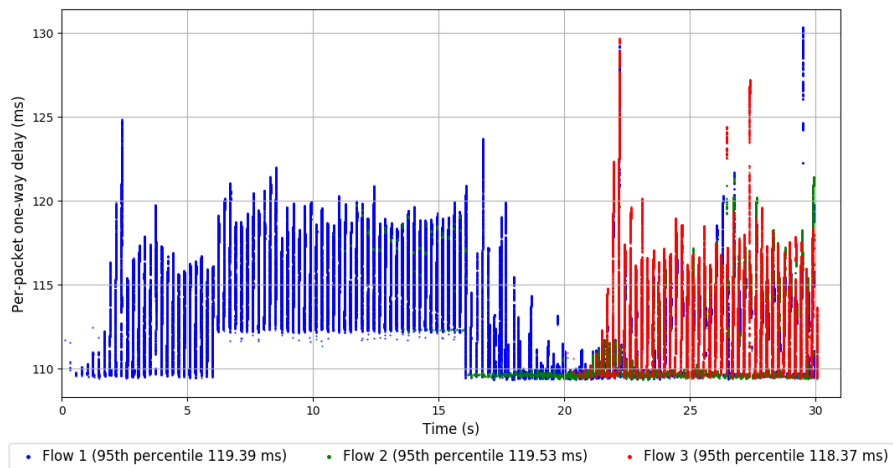
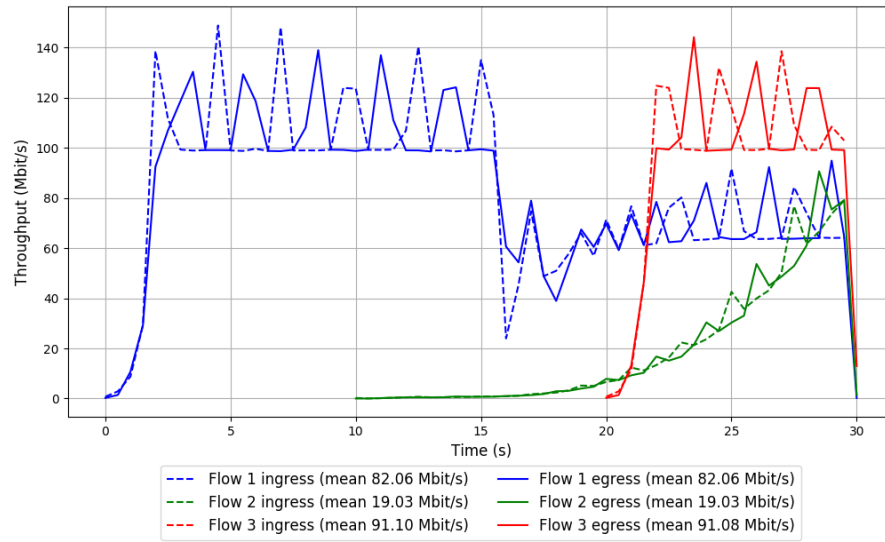
-- Flow 3:

Average throughput: 91.08 Mbit/s

95th percentile per-packet one-way delay: 118.368 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-28 14:37:43

End at: 2018-02-28 14:38:13

Below is generated by plot.py at 2018-02-28 17:51:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.56 Mbit/s

95th percentile per-packet one-way delay: 119.361 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 74.11 Mbit/s

95th percentile per-packet one-way delay: 118.856 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.64 Mbit/s

95th percentile per-packet one-way delay: 120.893 ms

Loss rate: 0.00%

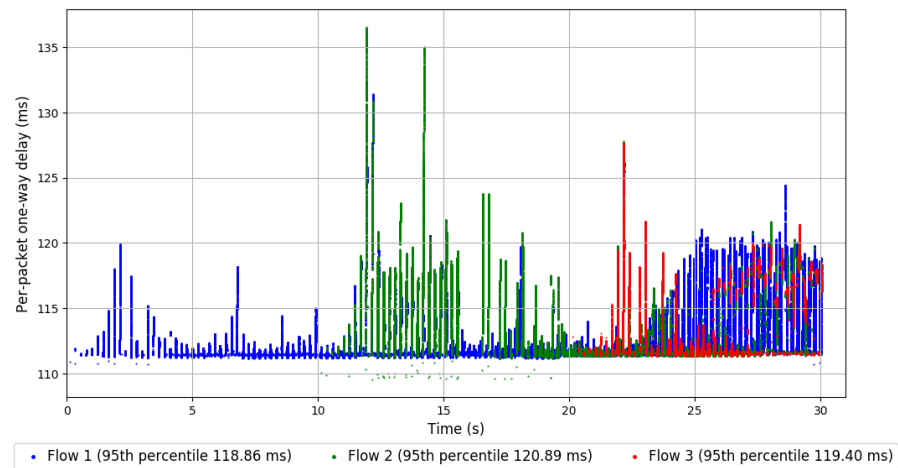
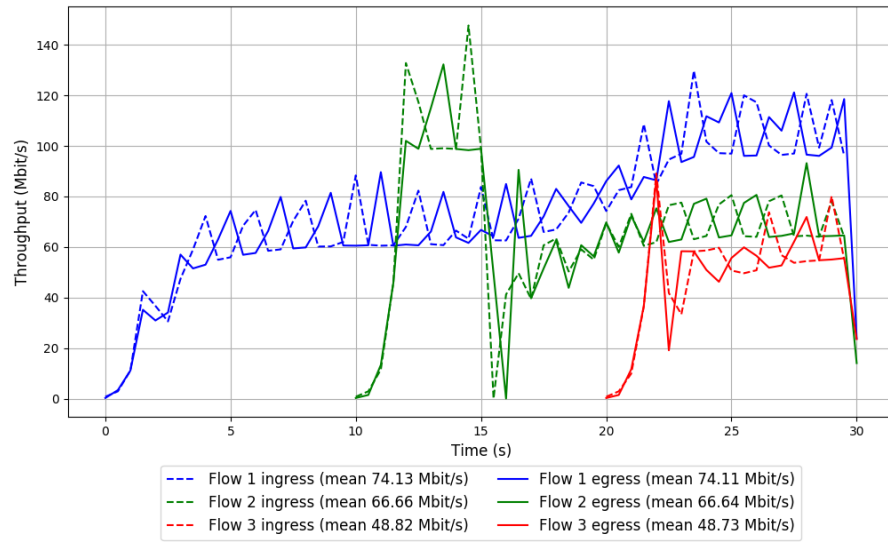
-- Flow 3:

Average throughput: 48.73 Mbit/s

95th percentile per-packet one-way delay: 119.396 ms

Loss rate: 0.14%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-28 14:57:39

End at: 2018-02-28 14:58:09

Below is generated by plot.py at 2018-02-28 17:51:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.79 Mbit/s

95th percentile per-packet one-way delay: 117.295 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.18 Mbit/s

95th percentile per-packet one-way delay: 118.191 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.76 Mbit/s

95th percentile per-packet one-way delay: 114.895 ms

Loss rate: 0.00%

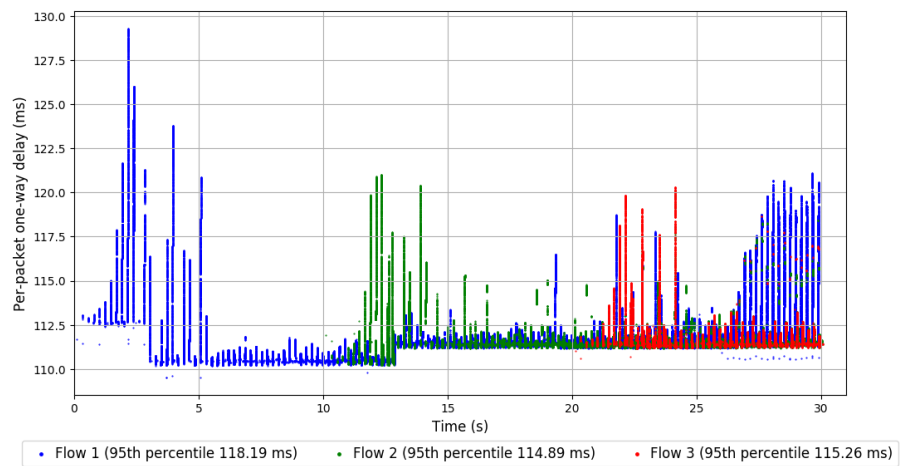
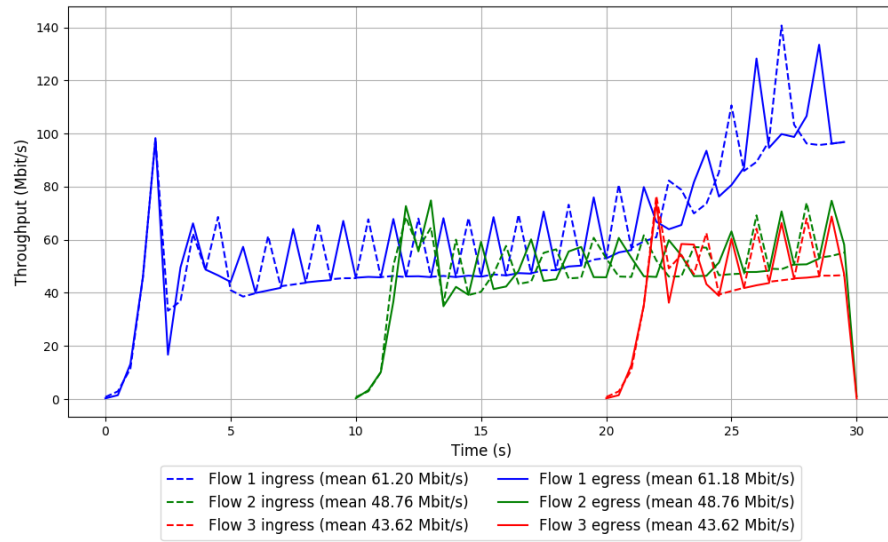
-- Flow 3:

Average throughput: 43.62 Mbit/s

95th percentile per-packet one-way delay: 115.262 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-28 15:17:59

End at: 2018-02-28 15:18:29

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 167.64 Mbit/s

95th percentile per-packet one-way delay: 119.672 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.06 Mbit/s

95th percentile per-packet one-way delay: 118.627 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.27 Mbit/s

95th percentile per-packet one-way delay: 120.814 ms

Loss rate: 0.00%

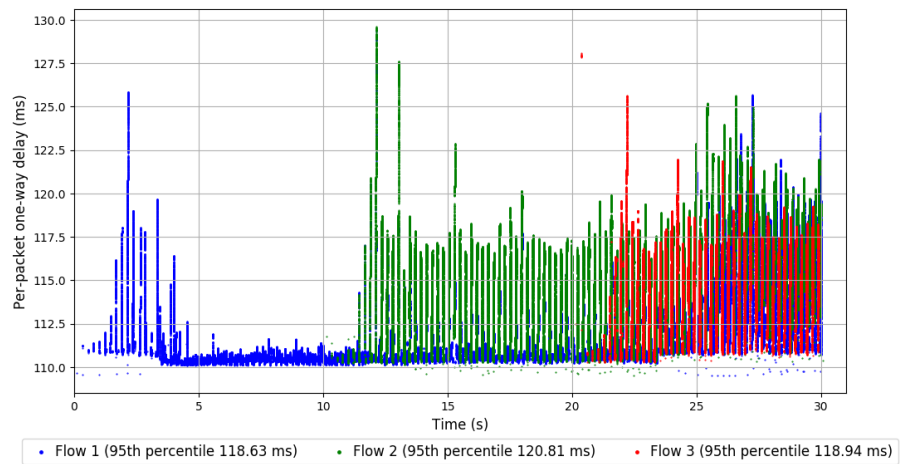
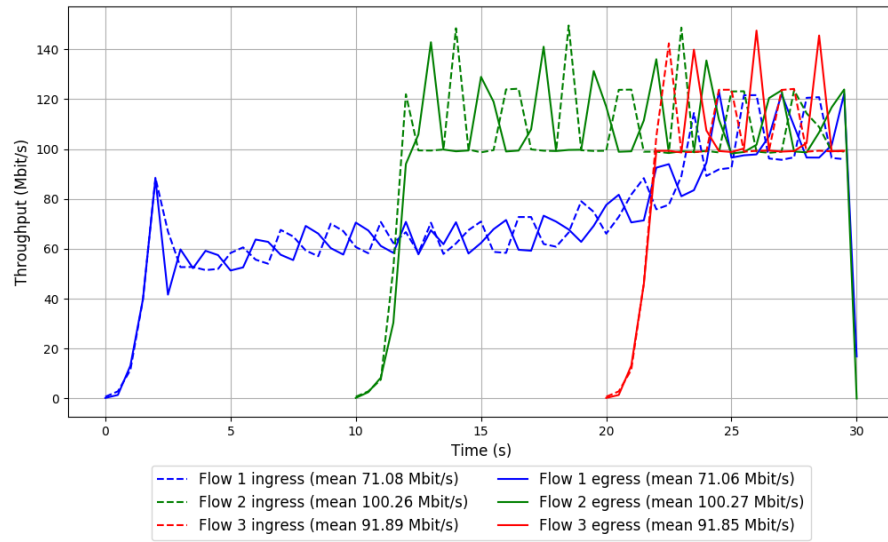
-- Flow 3:

Average throughput: 91.85 Mbit/s

95th percentile per-packet one-way delay: 118.938 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

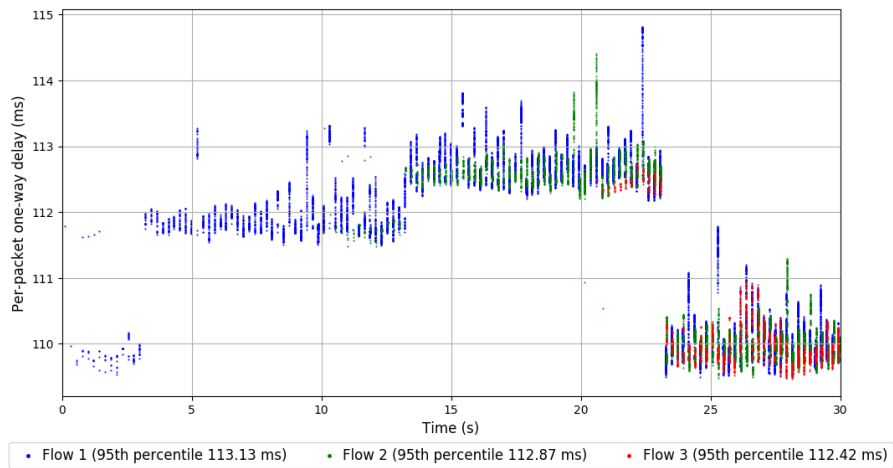
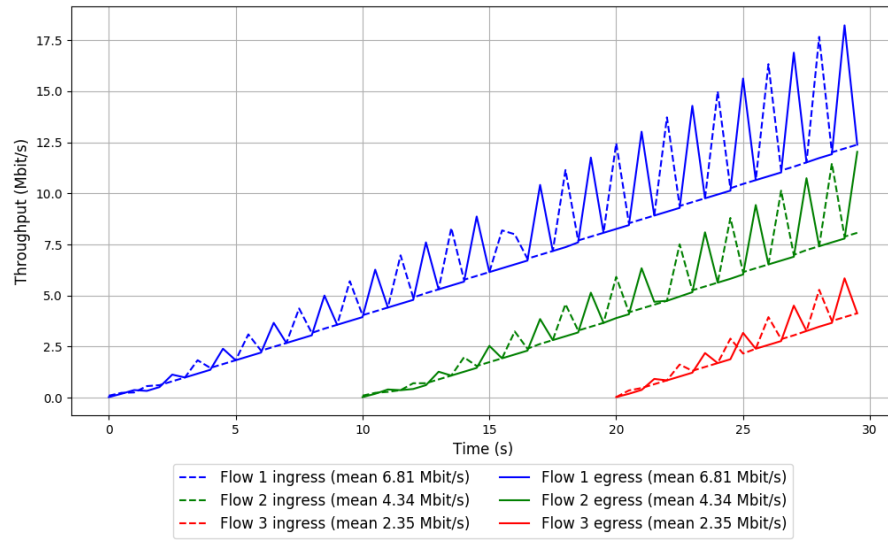


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-28 12:26:29
End at: 2018-02-28 12:26:59

# Below is generated by plot.py at 2018-02-28 17:51:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 113.048 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 113.126 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 112.874 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 112.416 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

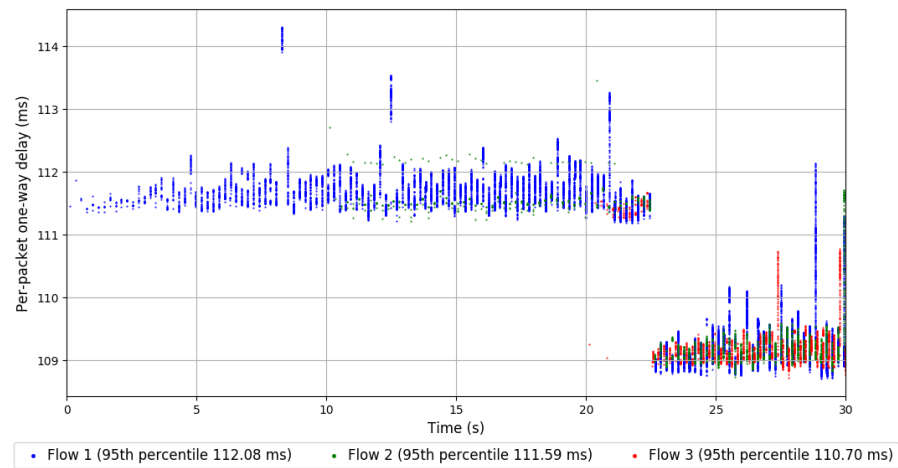
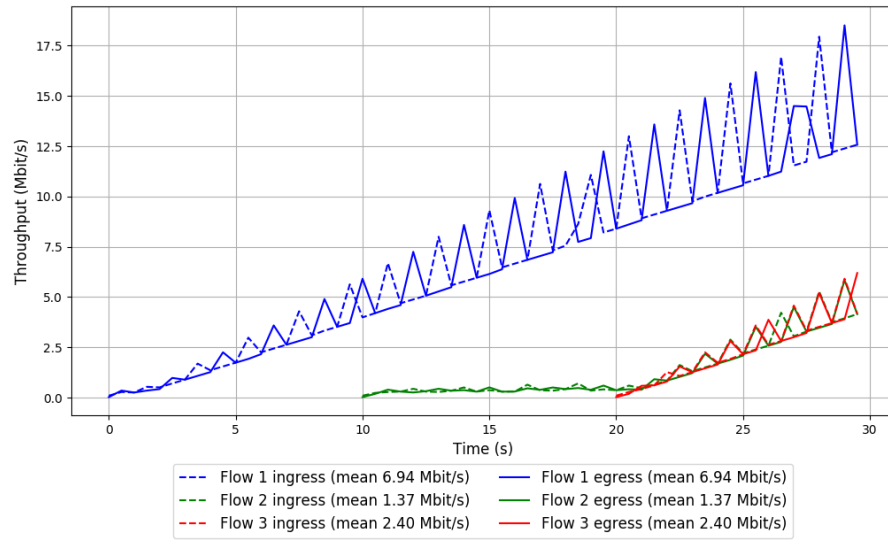


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-28 12:46:00
End at: 2018-02-28 12:46:30

# Below is generated by plot.py at 2018-02-28 17:51:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 112.036 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 112.082 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 111.589 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 110.704 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-28 13:05:48

End at: 2018-02-28 13:06:18

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.49 Mbit/s

95th percentile per-packet one-way delay: 113.305 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 113.328 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 113.247 ms

Loss rate: 0.00%

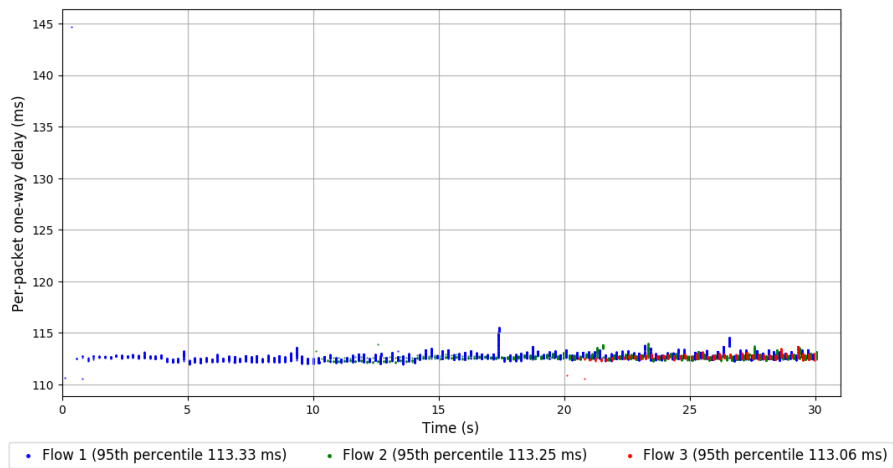
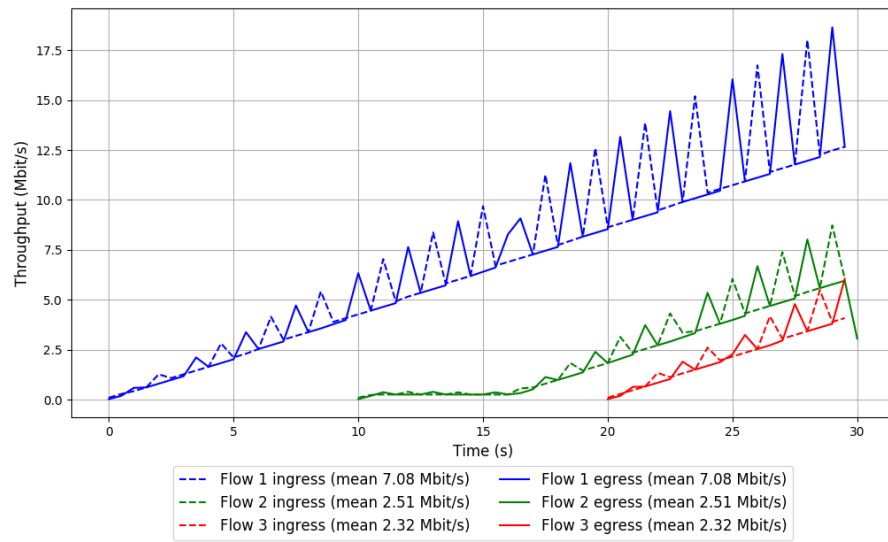
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.062 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-28 13:25:34

End at: 2018-02-28 13:26:05

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.44 Mbit/s

95th percentile per-packet one-way delay: 112.799 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 112.830 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.637 ms

Loss rate: 0.00%

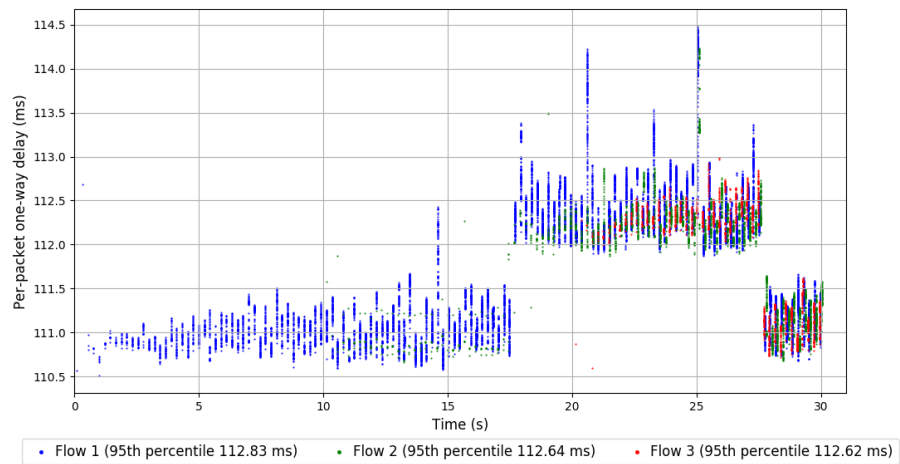
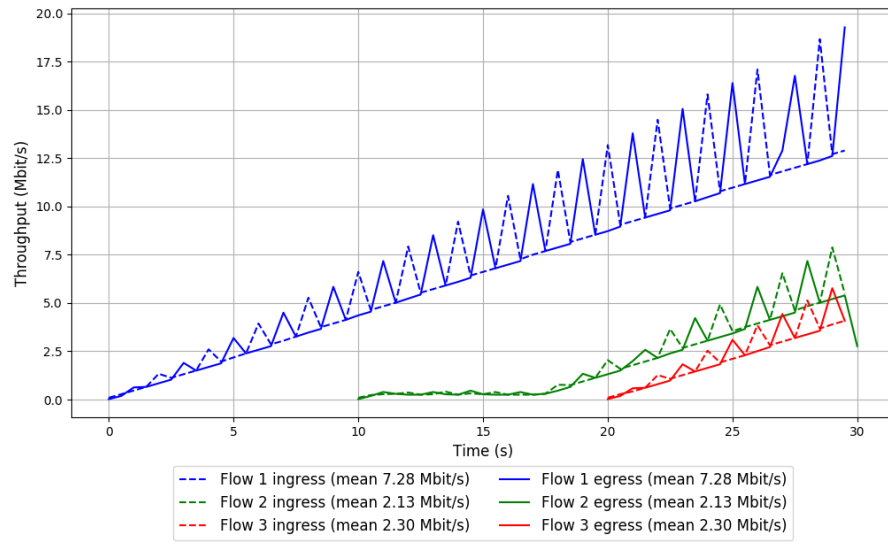
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 112.620 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-28 13:45:32

End at: 2018-02-28 13:46:02

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.22 Mbit/s

95th percentile per-packet one-way delay: 112.612 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.36 Mbit/s

95th percentile per-packet one-way delay: 112.677 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.75 Mbit/s

95th percentile per-packet one-way delay: 112.518 ms

Loss rate: 0.00%

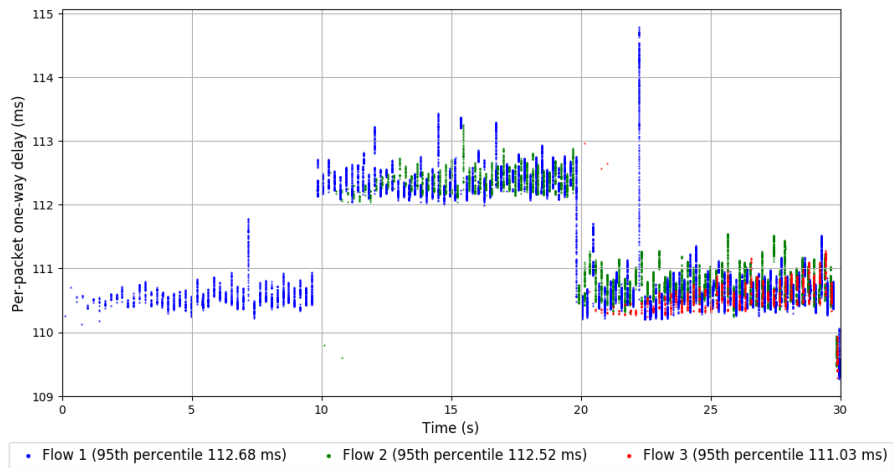
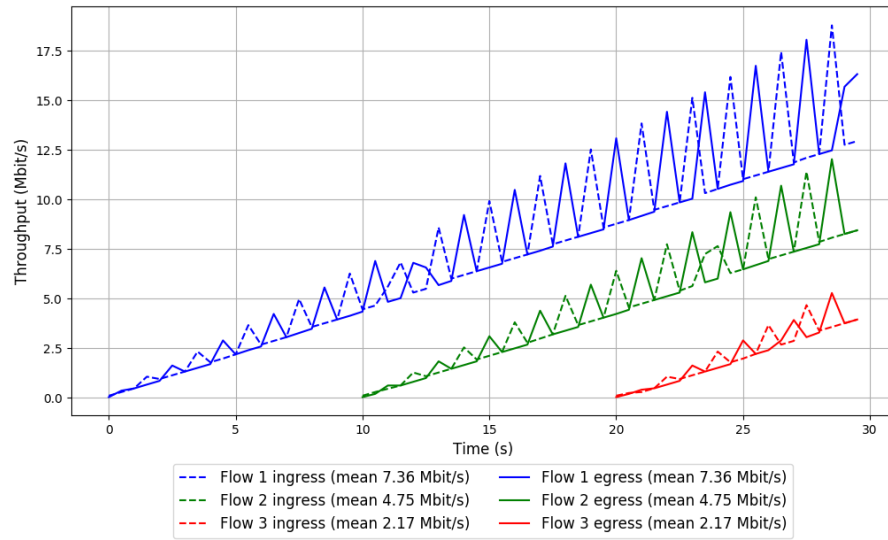
-- Flow 3:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 111.027 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-28 14:05:24

End at: 2018-02-28 14:05:54

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.38 Mbit/s

95th percentile per-packet one-way delay: 112.871 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 112.963 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 112.329 ms

Loss rate: 0.00%

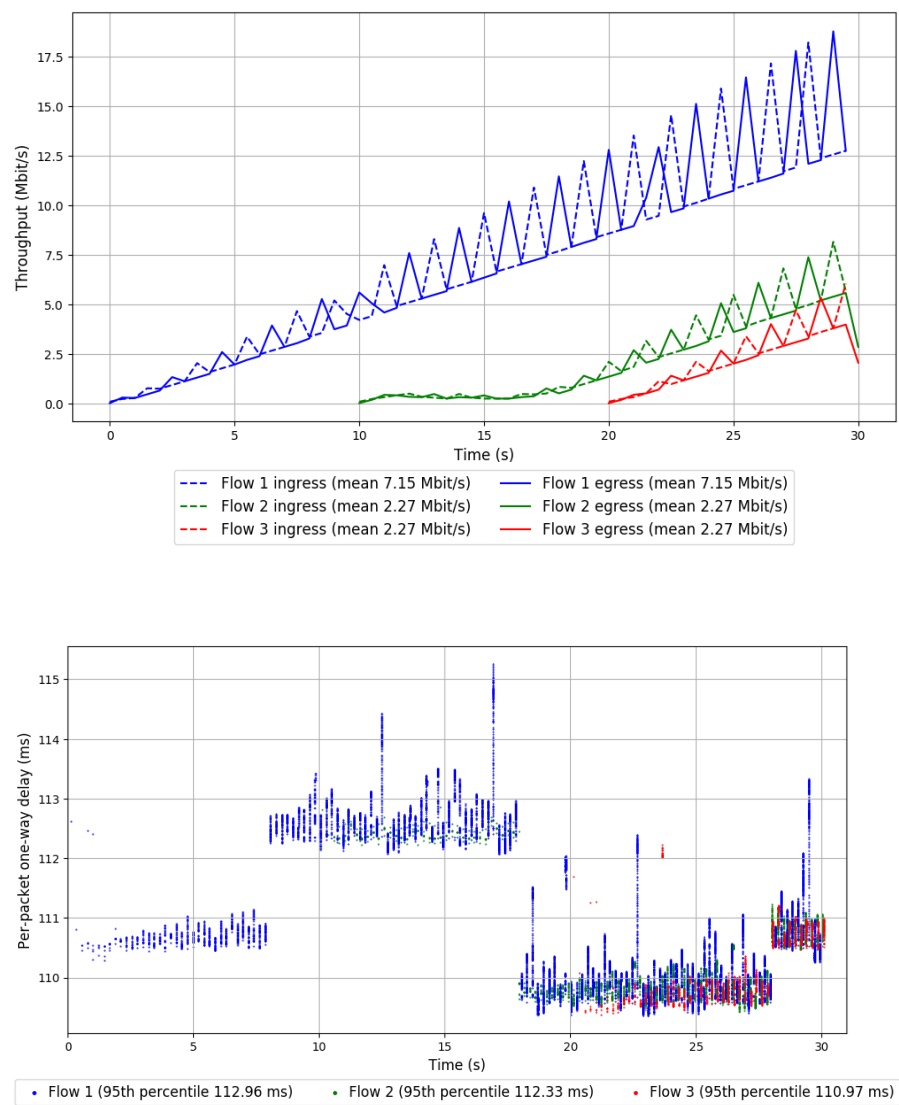
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 110.966 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-28 14:25:12

End at: 2018-02-28 14:25:42

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.35 Mbit/s

95th percentile per-packet one-way delay: 110.354 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.98 Mbit/s

95th percentile per-packet one-way delay: 110.352 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.58 Mbit/s

95th percentile per-packet one-way delay: 110.366 ms

Loss rate: 0.00%

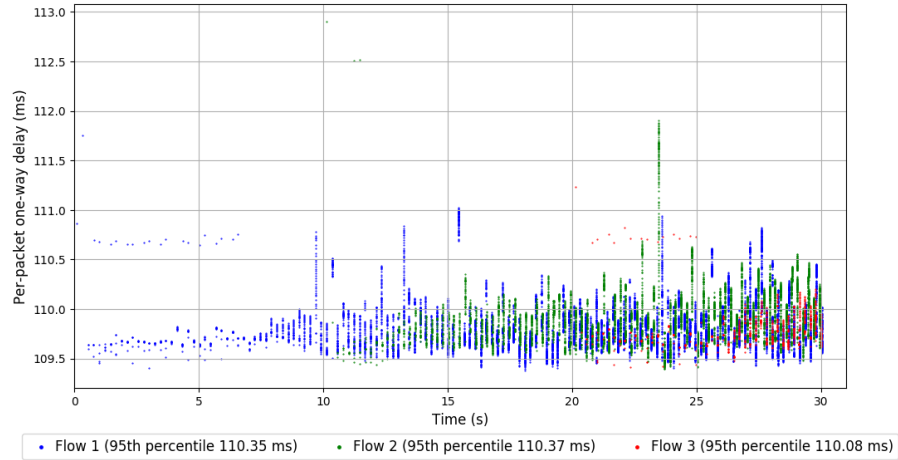
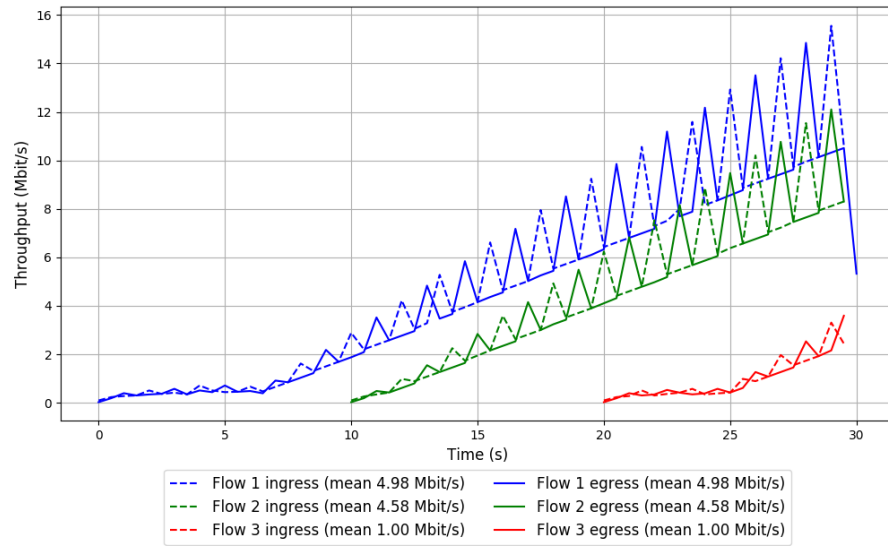
-- Flow 3:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 110.079 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-28 14:45:08

End at: 2018-02-28 14:45:38

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.91 Mbit/s

95th percentile per-packet one-way delay: 112.370 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 112.540 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 112.239 ms

Loss rate: 0.00%

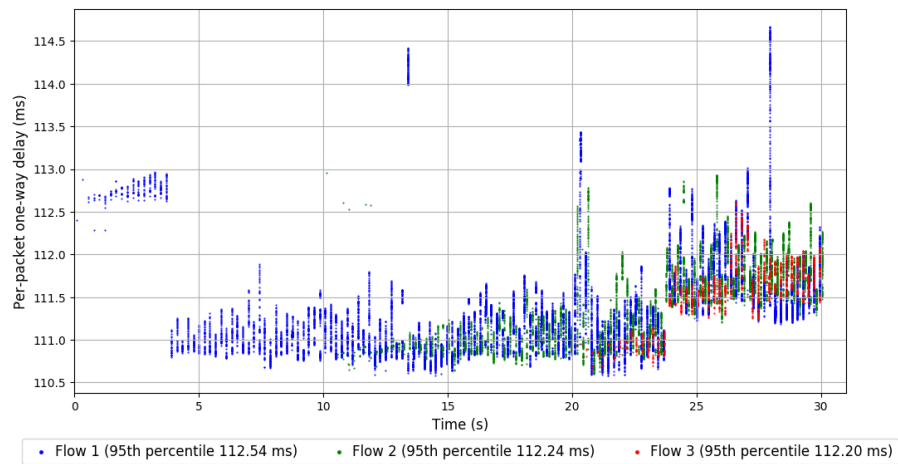
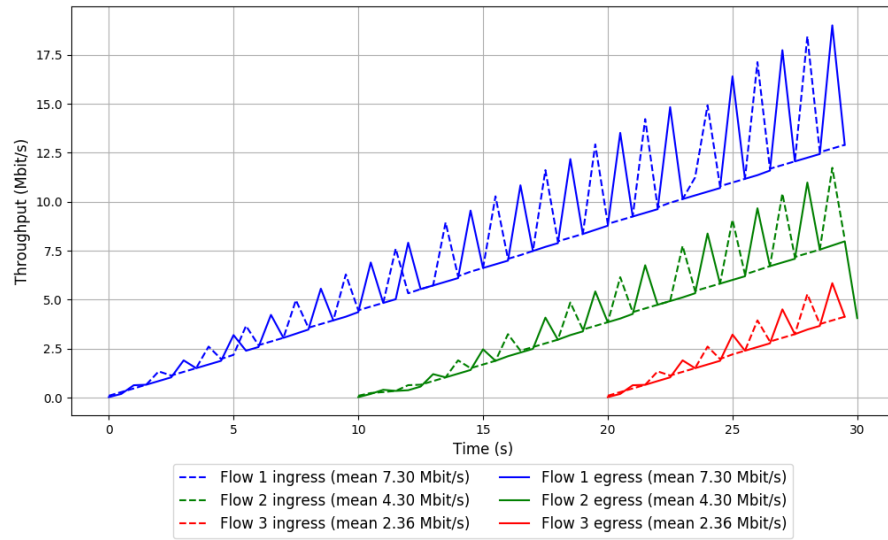
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 112.199 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-28 15:04:42

End at: 2018-02-28 15:05:12

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 111.690 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 111.965 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 111.496 ms

Loss rate: 0.00%

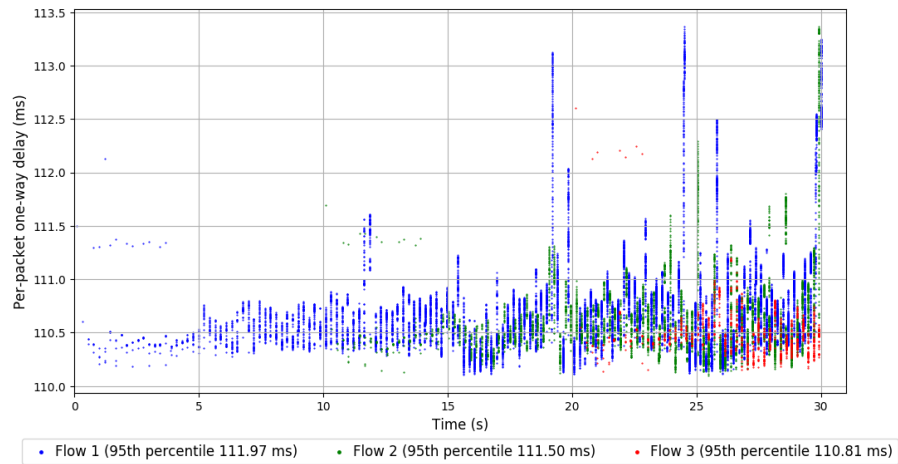
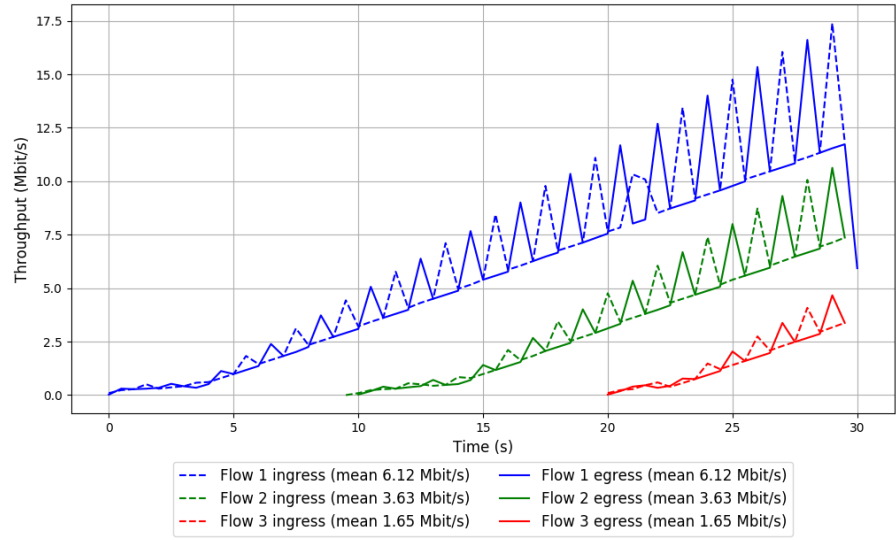
-- Flow 3:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 110.810 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-28 15:25:27

End at: 2018-02-28 15:25:57

Below is generated by plot.py at 2018-02-28 17:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.04 Mbit/s

95th percentile per-packet one-way delay: 111.573 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 111.649 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 111.422 ms

Loss rate: 0.00%

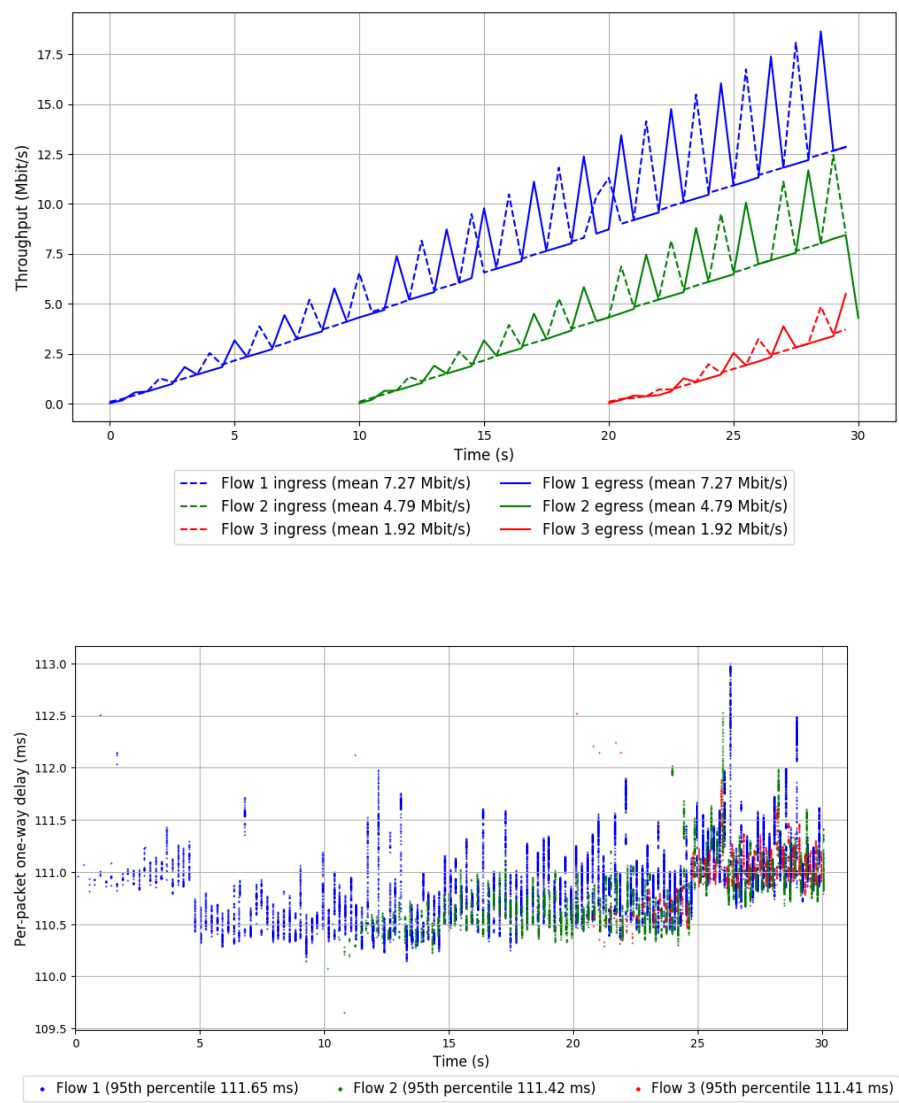
-- Flow 3:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 111.411 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

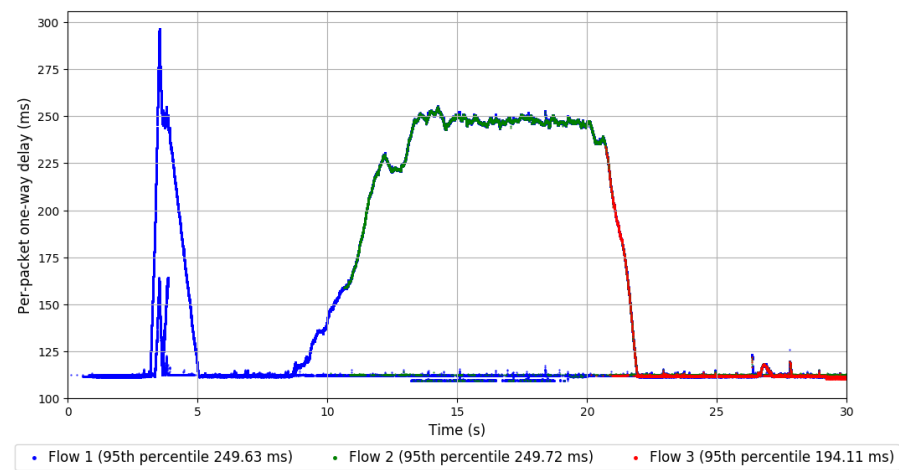
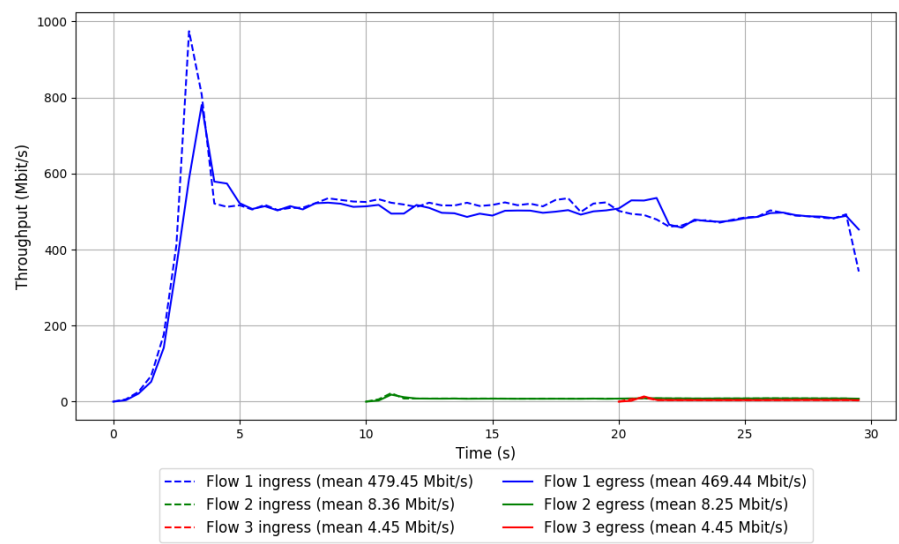


```
Run 1: Statistics of PCC

Start at: 2018-02-28 12:37:53
End at: 2018-02-28 12:38:23

# Below is generated by plot.py at 2018-02-28 17:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 476.39 Mbit/s
95th percentile per-packet one-way delay: 249.624 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 469.44 Mbit/s
95th percentile per-packet one-way delay: 249.630 ms
Loss rate: 2.09%
-- Flow 2:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 249.721 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 194.111 ms
Loss rate: 0.01%
```

Run 1: Report of PCC — Data Link

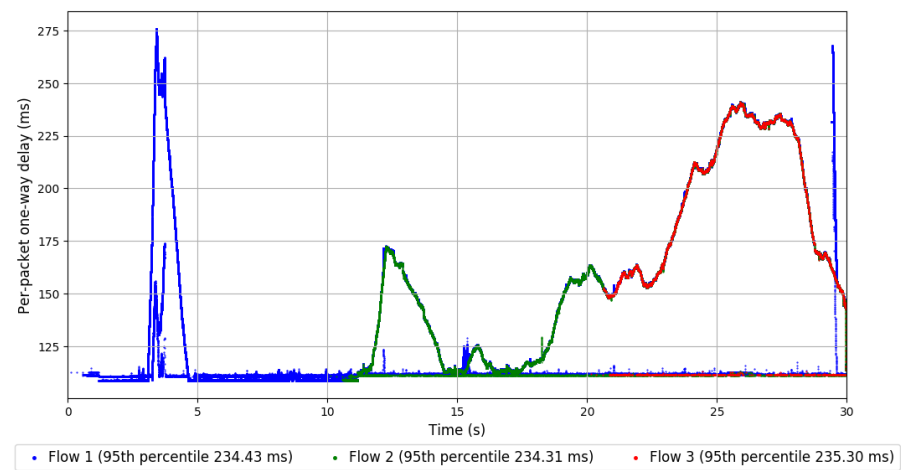
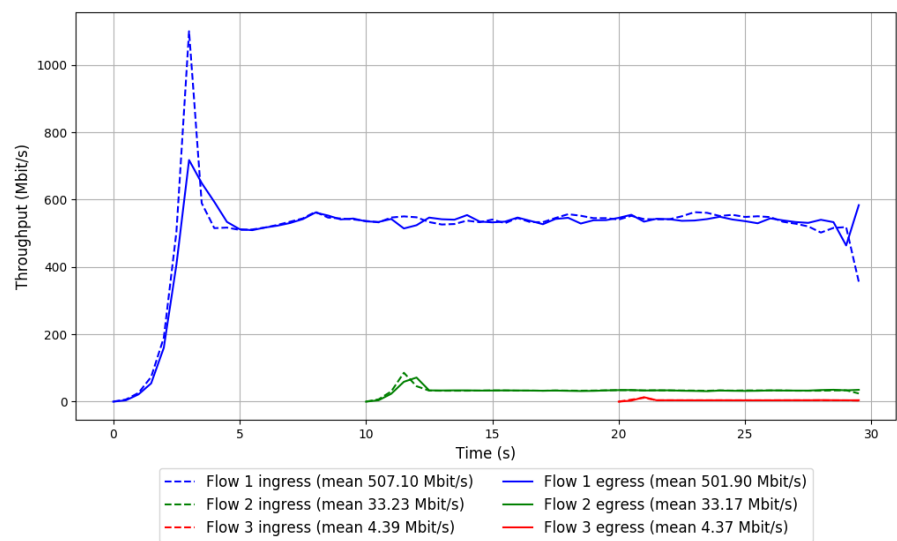


```
Run 2: Statistics of PCC

Start at: 2018-02-28 12:57:21
End at: 2018-02-28 12:57:51

# Below is generated by plot.py at 2018-02-28 17:58:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.36 Mbit/s
95th percentile per-packet one-way delay: 234.424 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 501.90 Mbit/s
95th percentile per-packet one-way delay: 234.426 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 33.17 Mbit/s
95th percentile per-packet one-way delay: 234.308 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 235.300 ms
Loss rate: 0.28%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-28 13:17:04

End at: 2018-02-28 13:17:34

Below is generated by plot.py at 2018-02-28 17:58:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 523.99 Mbit/s

95th percentile per-packet one-way delay: 233.240 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 479.51 Mbit/s

95th percentile per-packet one-way delay: 233.260 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 66.36 Mbit/s

95th percentile per-packet one-way delay: 233.110 ms

Loss rate: 0.31%

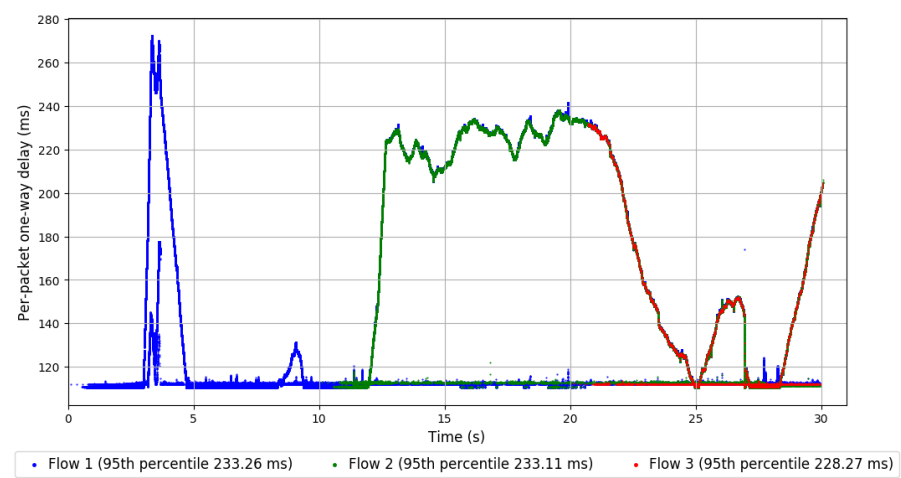
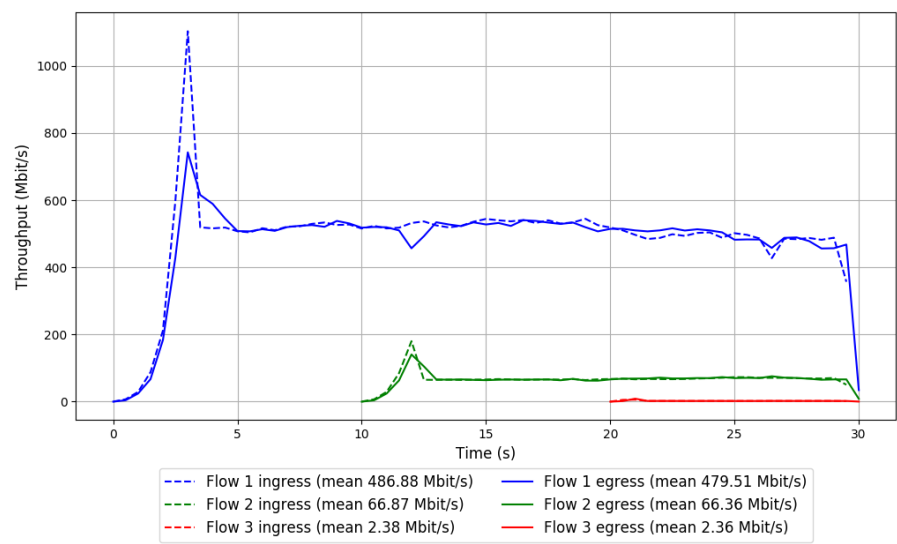
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 228.270 ms

Loss rate: 0.00%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-28 13:36:57

End at: 2018-02-28 13:37:27

Below is generated by plot.py at 2018-02-28 17:58:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 459.15 Mbit/s

95th percentile per-packet one-way delay: 251.539 ms

Loss rate: 2.06%

-- Flow 1:

Average throughput: 455.73 Mbit/s

95th percentile per-packet one-way delay: 251.542 ms

Loss rate: 2.07%

-- Flow 2:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 251.214 ms

Loss rate: 1.30%

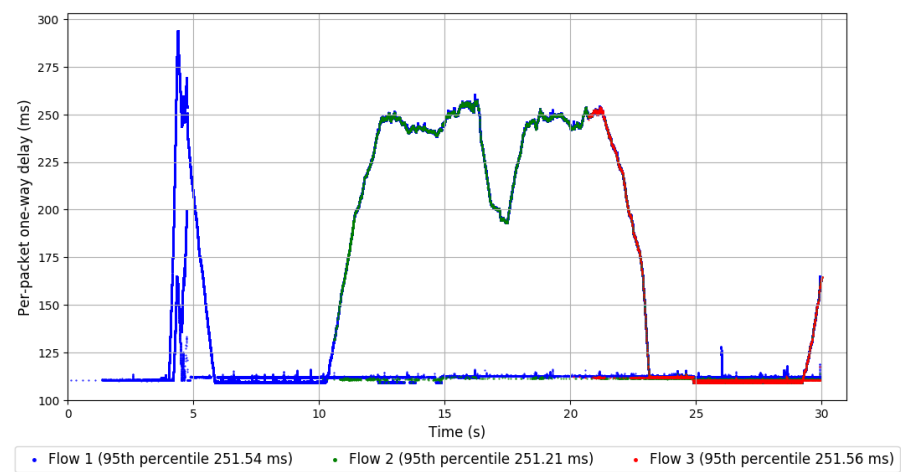
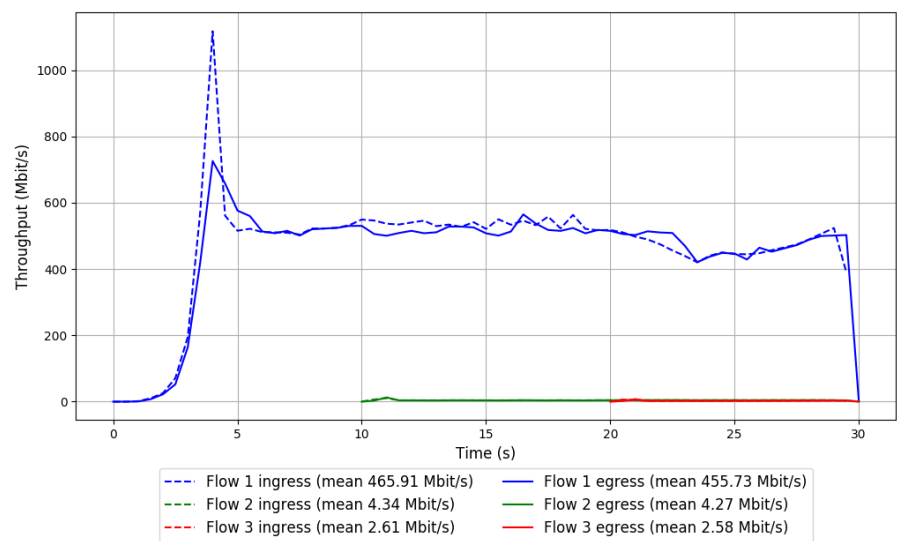
-- Flow 3:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 251.556 ms

Loss rate: 0.75%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-28 13:56:53

End at: 2018-02-28 13:57:23

Below is generated by plot.py at 2018-02-28 17:59:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 521.12 Mbit/s

95th percentile per-packet one-way delay: 237.215 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 496.55 Mbit/s

95th percentile per-packet one-way delay: 237.239 ms

Loss rate: 1.93%

-- Flow 2:

Average throughput: 32.71 Mbit/s

95th percentile per-packet one-way delay: 237.194 ms

Loss rate: 1.42%

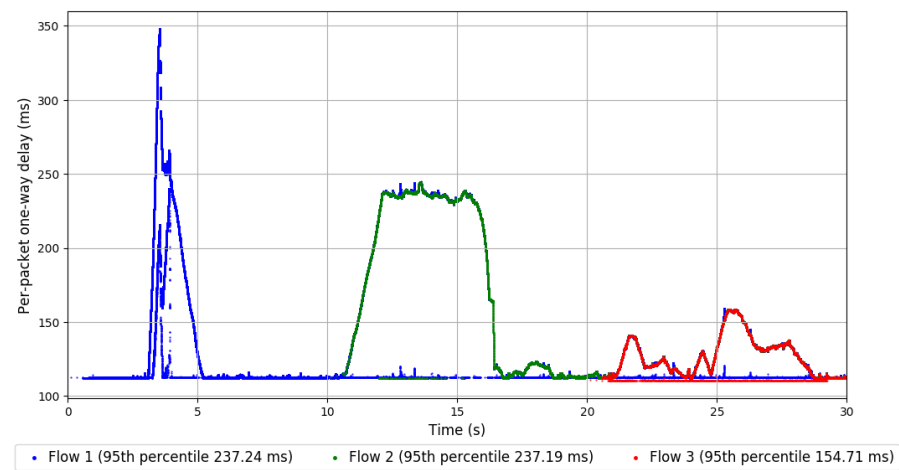
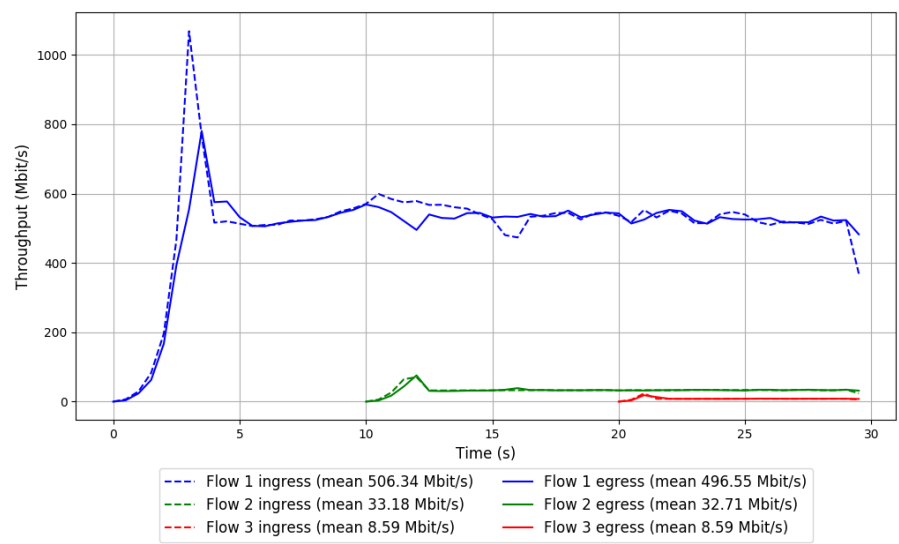
-- Flow 3:

Average throughput: 8.59 Mbit/s

95th percentile per-packet one-way delay: 154.708 ms

Loss rate: 0.00%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-28 14:16:48

End at: 2018-02-28 14:17:18

Below is generated by plot.py at 2018-02-28 17:59:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 510.01 Mbit/s

95th percentile per-packet one-way delay: 242.526 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 463.09 Mbit/s

95th percentile per-packet one-way delay: 242.422 ms

Loss rate: 2.14%

-- Flow 2:

Average throughput: 62.45 Mbit/s

95th percentile per-packet one-way delay: 240.967 ms

Loss rate: 0.47%

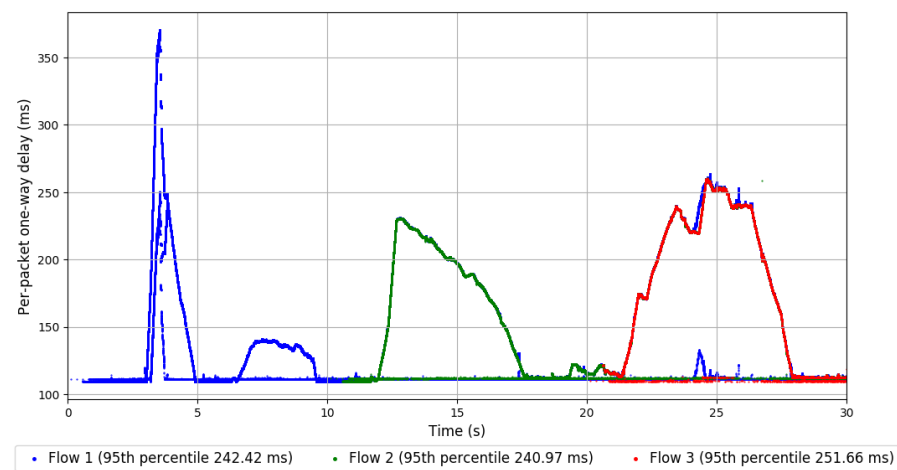
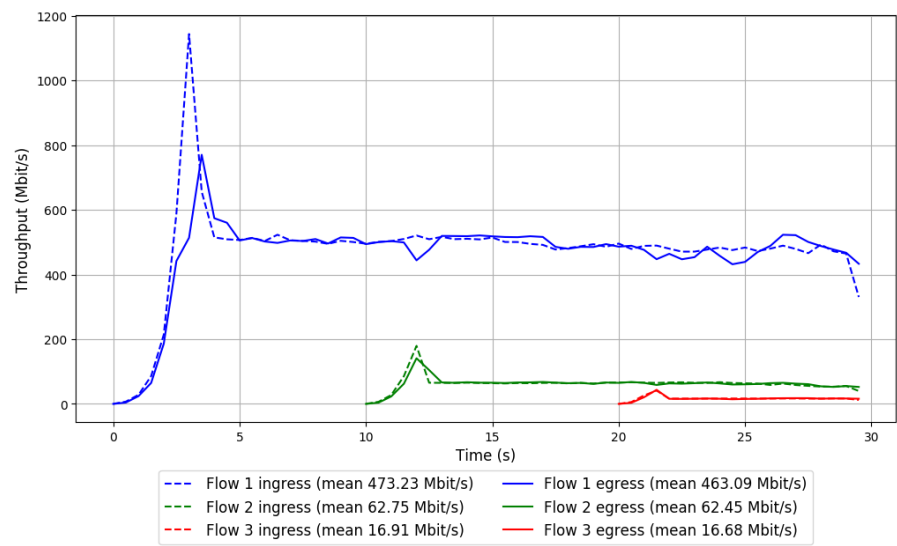
-- Flow 3:

Average throughput: 16.68 Mbit/s

95th percentile per-packet one-way delay: 251.662 ms

Loss rate: 1.28%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-28 14:36:38

End at: 2018-02-28 14:37:08

Below is generated by plot.py at 2018-02-28 17:59:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.56 Mbit/s

95th percentile per-packet one-way delay: 255.586 ms

Loss rate: 3.20%

-- Flow 1:

Average throughput: 384.54 Mbit/s

95th percentile per-packet one-way delay: 255.672 ms

Loss rate: 3.32%

-- Flow 2:

Average throughput: 61.36 Mbit/s

95th percentile per-packet one-way delay: 255.086 ms

Loss rate: 2.08%

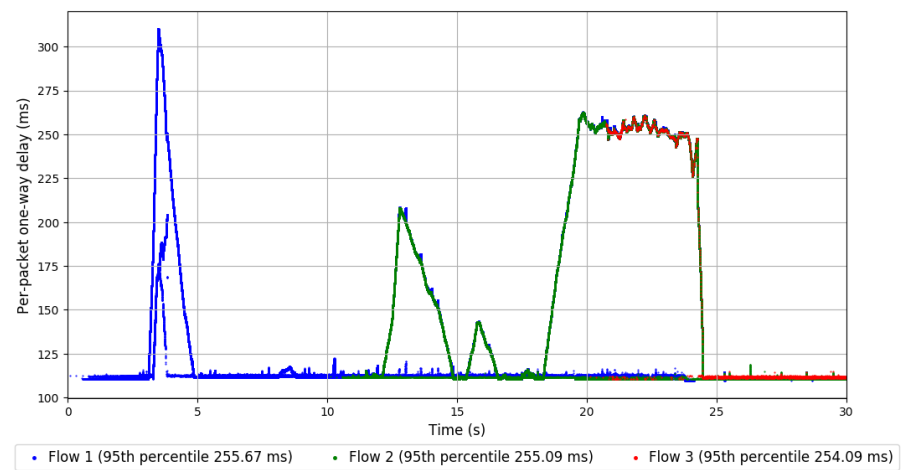
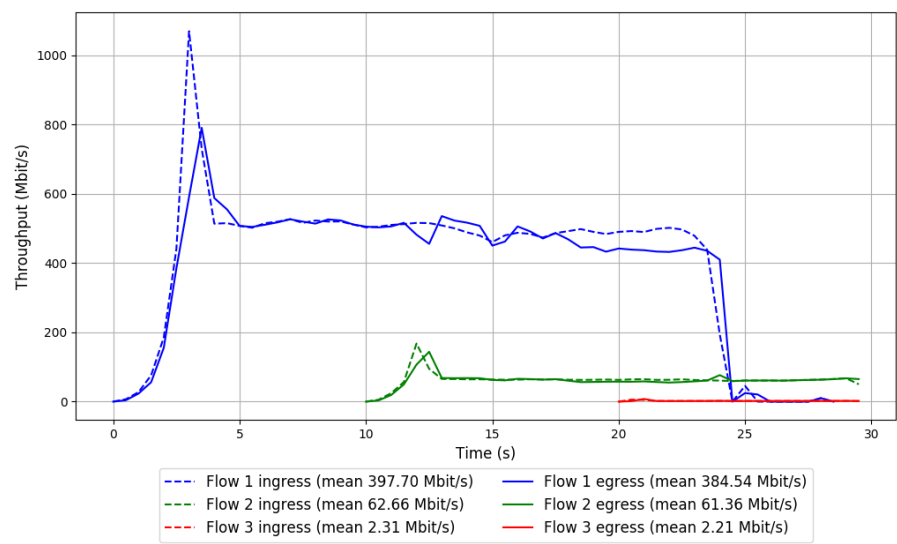
-- Flow 3:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 254.087 ms

Loss rate: 4.23%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-28 14:56:31

End at: 2018-02-28 14:57:01

Below is generated by plot.py at 2018-02-28 18:00:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 508.49 Mbit/s

95th percentile per-packet one-way delay: 254.184 ms

Loss rate: 4.20%

-- Flow 1:

Average throughput: 424.70 Mbit/s

95th percentile per-packet one-way delay: 254.010 ms

Loss rate: 4.11%

-- Flow 2:

Average throughput: 123.68 Mbit/s

95th percentile per-packet one-way delay: 254.638 ms

Loss rate: 4.69%

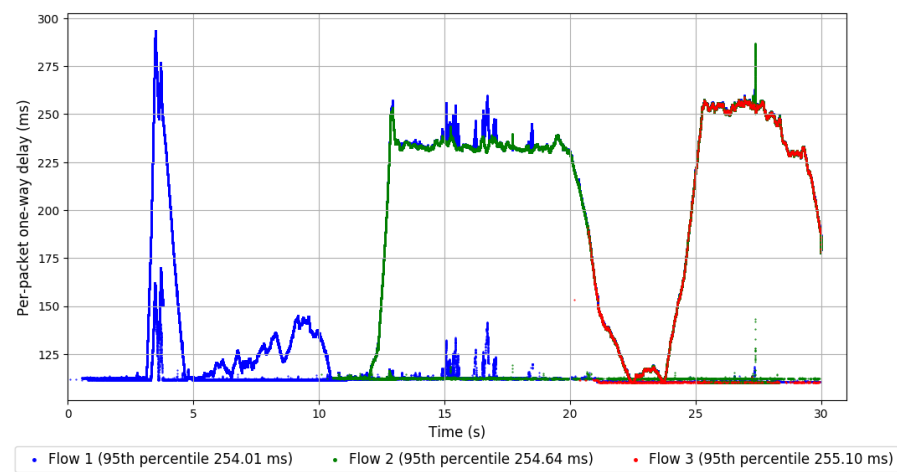
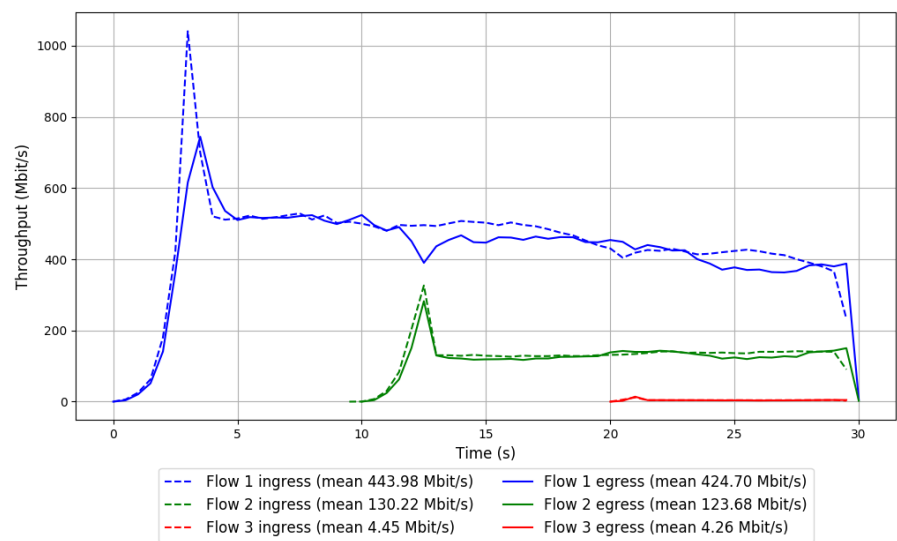
-- Flow 3:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 255.101 ms

Loss rate: 3.93%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-28 15:16:51

End at: 2018-02-28 15:17:21

Below is generated by plot.py at 2018-02-28 18:06:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 501.85 Mbit/s

95th percentile per-packet one-way delay: 231.562 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 479.41 Mbit/s

95th percentile per-packet one-way delay: 231.639 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 232.577 ms

Loss rate: 0.05%

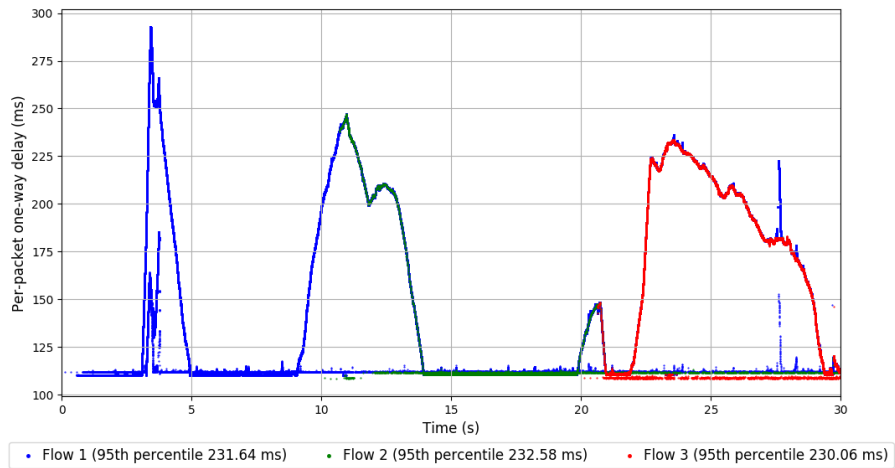
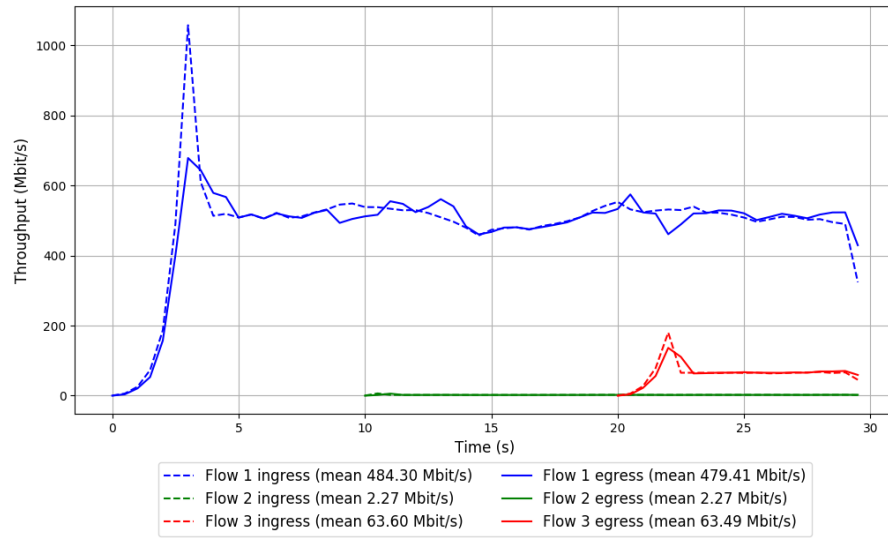
-- Flow 3:

Average throughput: 63.49 Mbit/s

95th percentile per-packet one-way delay: 230.064 ms

Loss rate: 0.13%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-28 15:36:39

End at: 2018-02-28 15:37:09

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.68 Mbit/s

95th percentile per-packet one-way delay: 246.045 ms

Loss rate: 3.51%

-- Flow 1:

Average throughput: 464.53 Mbit/s

95th percentile per-packet one-way delay: 246.052 ms

Loss rate: 3.45%

-- Flow 2:

Average throughput: 61.26 Mbit/s

95th percentile per-packet one-way delay: 245.947 ms

Loss rate: 4.14%

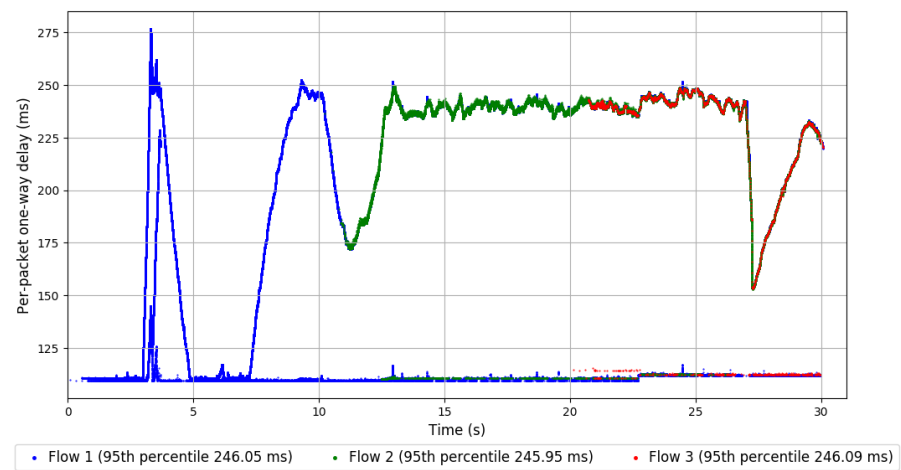
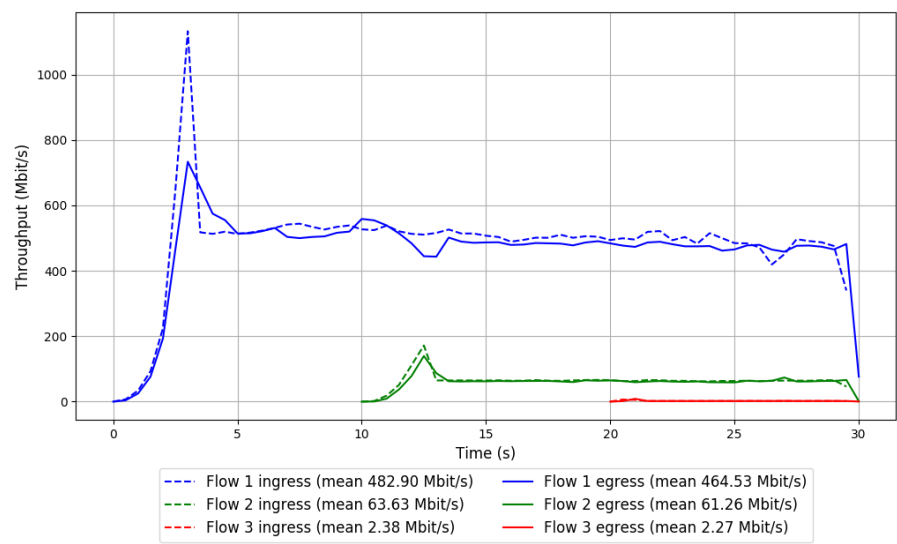
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 246.089 ms

Loss rate: 3.64%

Run 10: Report of PCC — Data Link

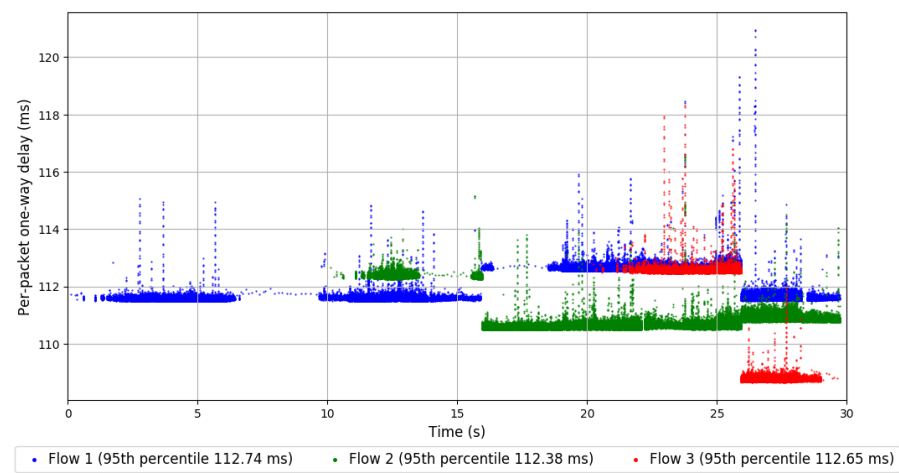
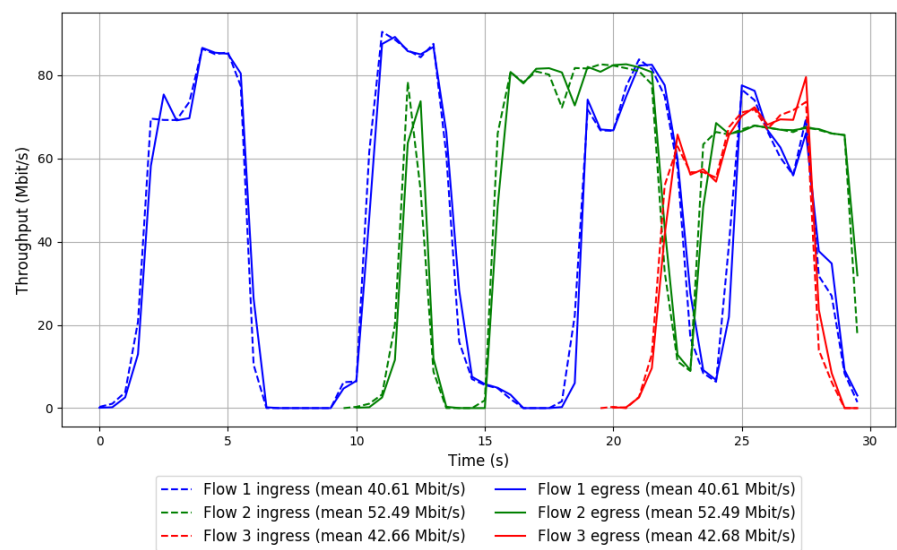


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-28 12:32:56
End at: 2018-02-28 12:33:26

# Below is generated by plot.py at 2018-02-28 18:06:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.11 Mbit/s
95th percentile per-packet one-way delay: 112.685 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 112.737 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.49 Mbit/s
95th percentile per-packet one-way delay: 112.376 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 42.68 Mbit/s
95th percentile per-packet one-way delay: 112.654 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-28 12:52:18

End at: 2018-02-28 12:52:49

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.53 Mbit/s

95th percentile per-packet one-way delay: 112.554 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.39 Mbit/s

95th percentile per-packet one-way delay: 112.518 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.54 Mbit/s

95th percentile per-packet one-way delay: 112.520 ms

Loss rate: 0.01%

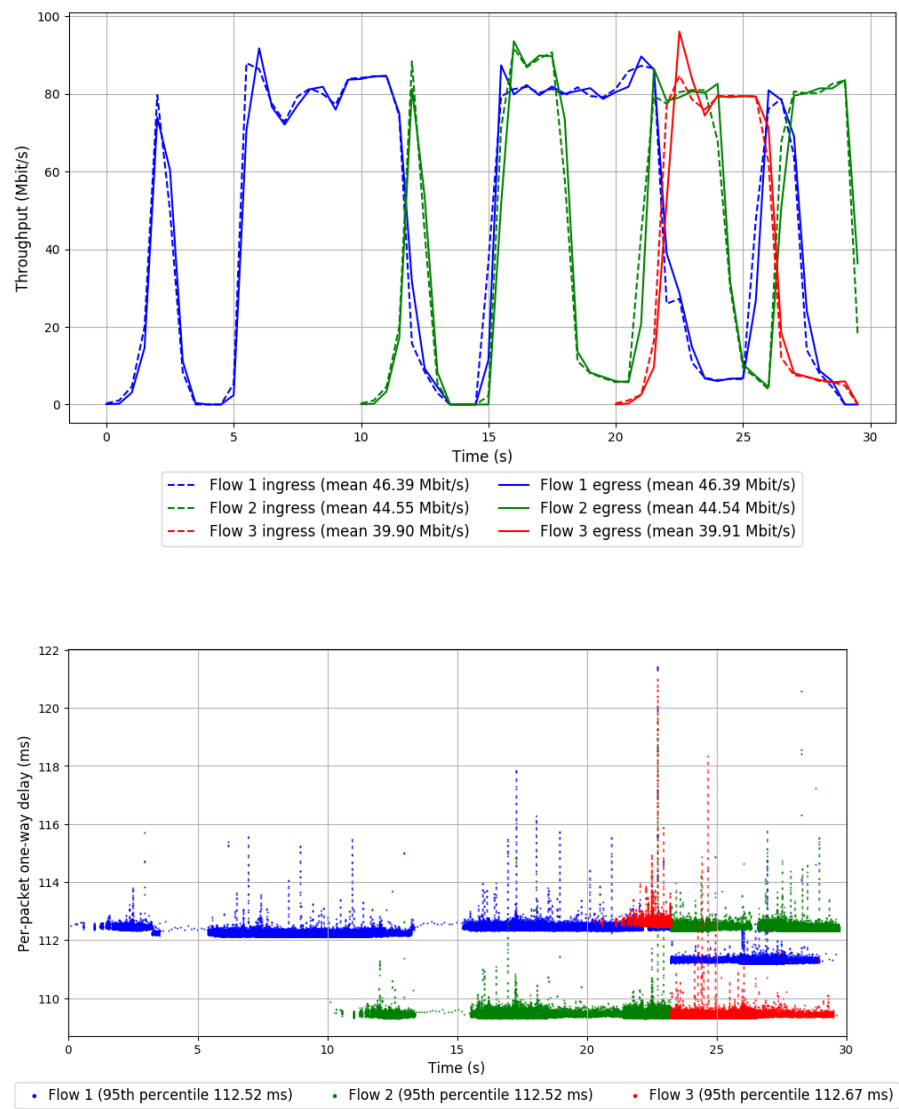
-- Flow 3:

Average throughput: 39.91 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-28 13:12:16

End at: 2018-02-28 13:12:46

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.28 Mbit/s

95th percentile per-packet one-way delay: 112.596 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 47.09 Mbit/s

95th percentile per-packet one-way delay: 112.495 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.13 Mbit/s

95th percentile per-packet one-way delay: 112.694 ms

Loss rate: 0.00%

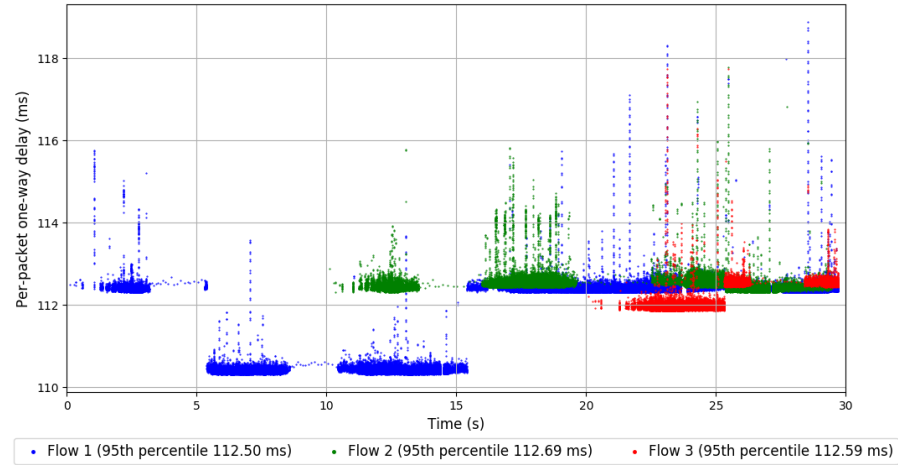
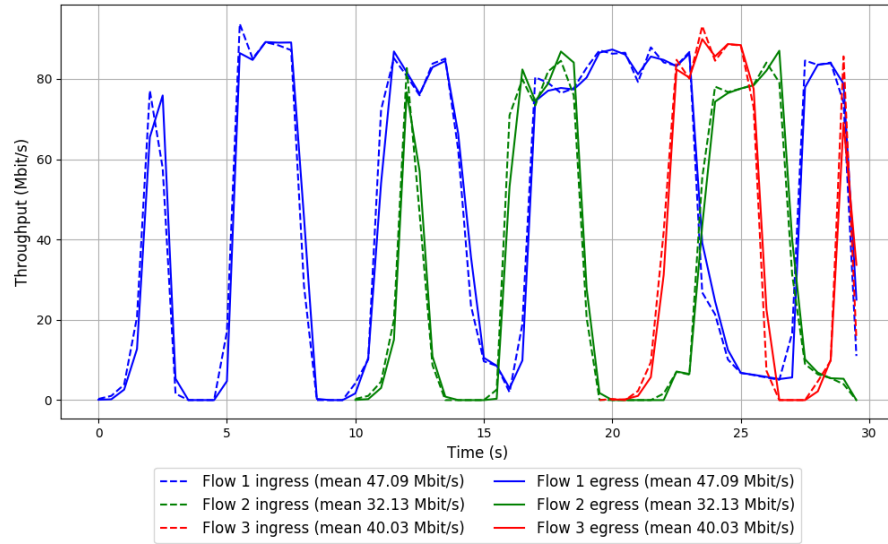
-- Flow 3:

Average throughput: 40.03 Mbit/s

95th percentile per-packet one-way delay: 112.586 ms

Loss rate: 0.03%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-28 13:31:58

End at: 2018-02-28 13:32:28

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.29 Mbit/s

95th percentile per-packet one-way delay: 111.863 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.11 Mbit/s

95th percentile per-packet one-way delay: 109.610 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.72 Mbit/s

95th percentile per-packet one-way delay: 110.611 ms

Loss rate: 0.00%

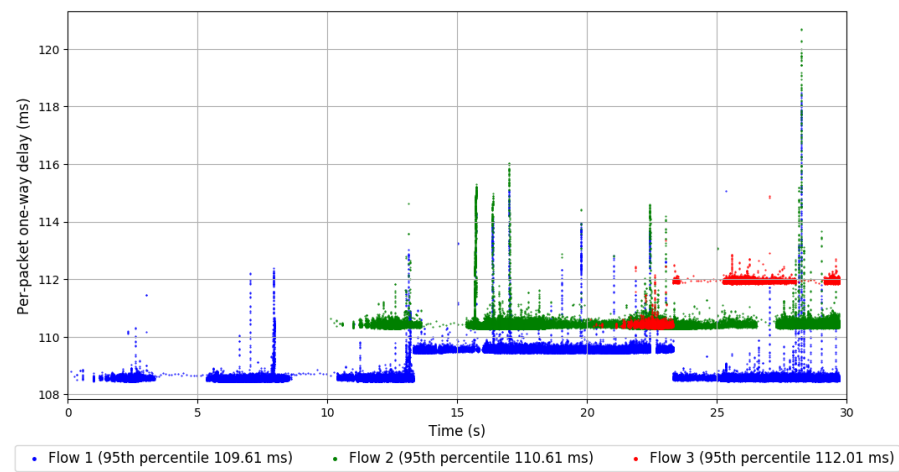
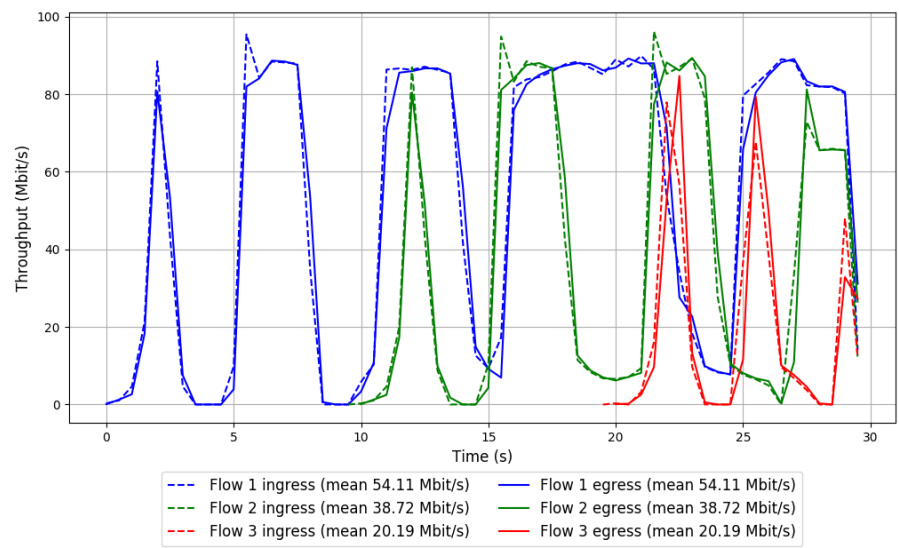
-- Flow 3:

Average throughput: 20.19 Mbit/s

95th percentile per-packet one-way delay: 112.013 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-28 13:51:54

End at: 2018-02-28 13:52:24

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.32 Mbit/s

95th percentile per-packet one-way delay: 112.625 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.72 Mbit/s

95th percentile per-packet one-way delay: 112.660 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.06 Mbit/s

95th percentile per-packet one-way delay: 112.258 ms

Loss rate: 0.00%

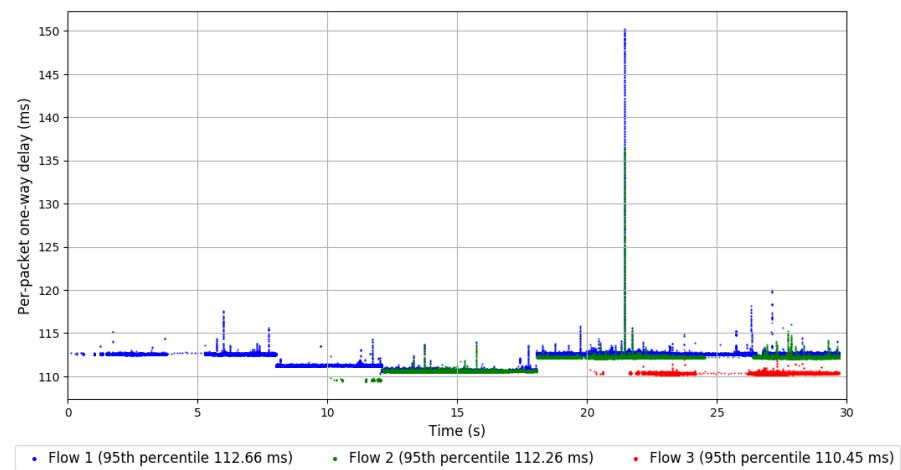
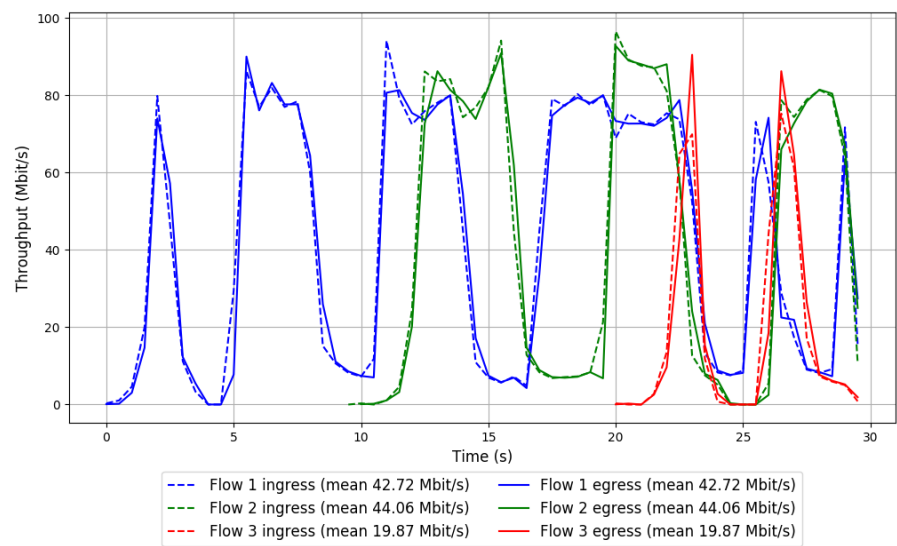
-- Flow 3:

Average throughput: 19.87 Mbit/s

95th percentile per-packet one-way delay: 110.455 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-28 14:11:44

End at: 2018-02-28 14:12:14

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.50 Mbit/s

95th percentile per-packet one-way delay: 112.155 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.84 Mbit/s

95th percentile per-packet one-way delay: 111.451 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.30 Mbit/s

95th percentile per-packet one-way delay: 110.418 ms

Loss rate: 0.00%

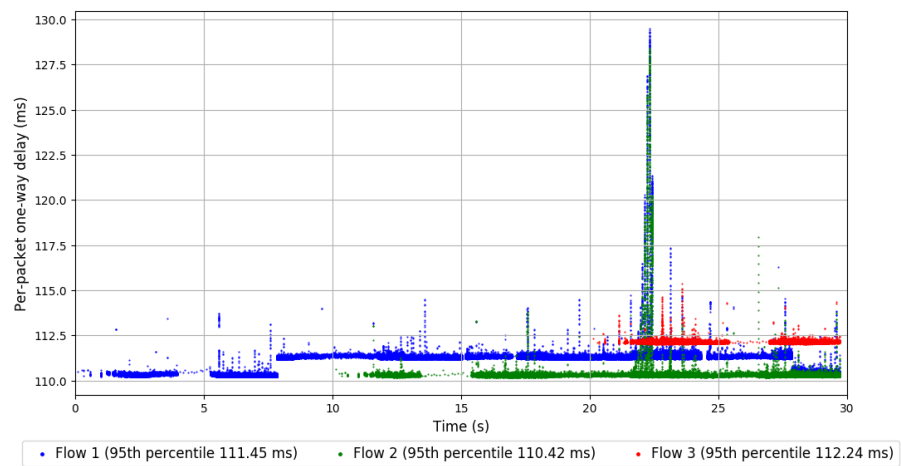
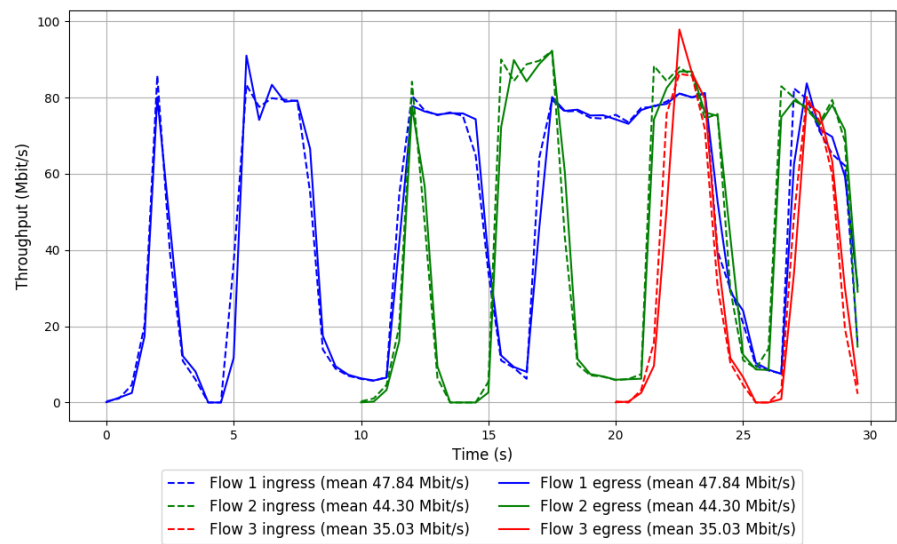
-- Flow 3:

Average throughput: 35.03 Mbit/s

95th percentile per-packet one-way delay: 112.238 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-28 14:31:40

End at: 2018-02-28 14:32:10

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.54 Mbit/s

95th percentile per-packet one-way delay: 112.531 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 45.15 Mbit/s

95th percentile per-packet one-way delay: 111.459 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.05 Mbit/s

95th percentile per-packet one-way delay: 109.660 ms

Loss rate: 0.00%

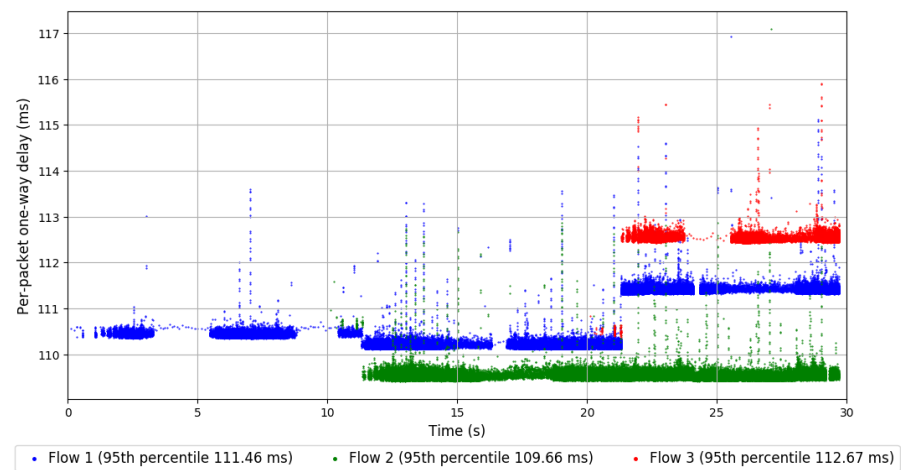
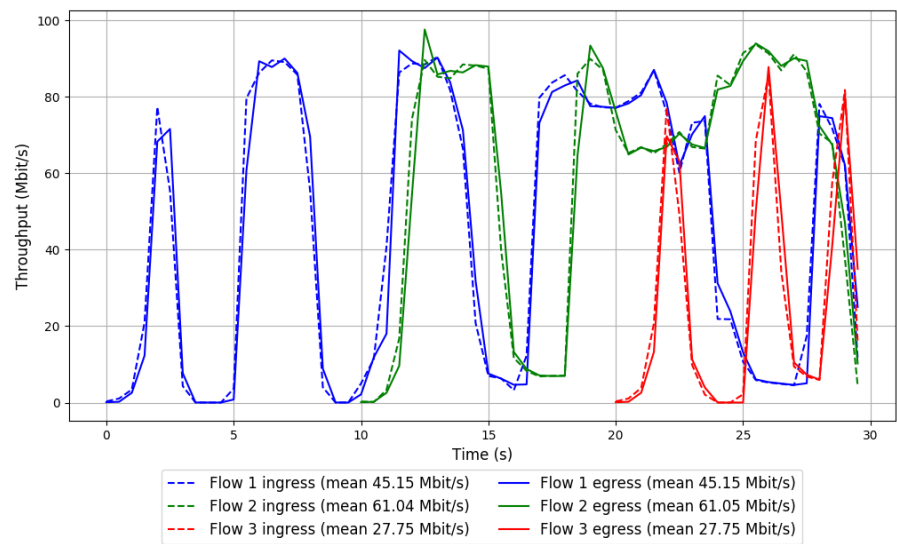
-- Flow 3:

Average throughput: 27.75 Mbit/s

95th percentile per-packet one-way delay: 112.671 ms

Loss rate: 0.02%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-28 14:51:32

End at: 2018-02-28 14:52:02

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.19 Mbit/s

95th percentile per-packet one-way delay: 112.613 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.51 Mbit/s

95th percentile per-packet one-way delay: 112.652 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.99 Mbit/s

95th percentile per-packet one-way delay: 112.322 ms

Loss rate: 0.00%

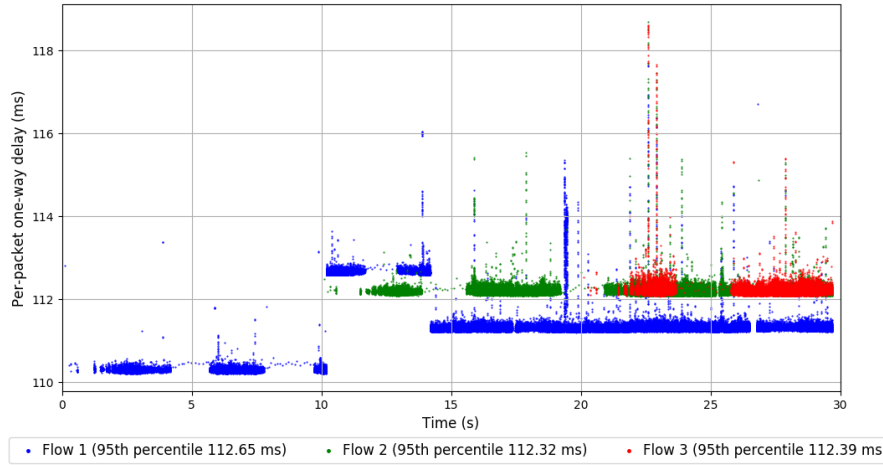
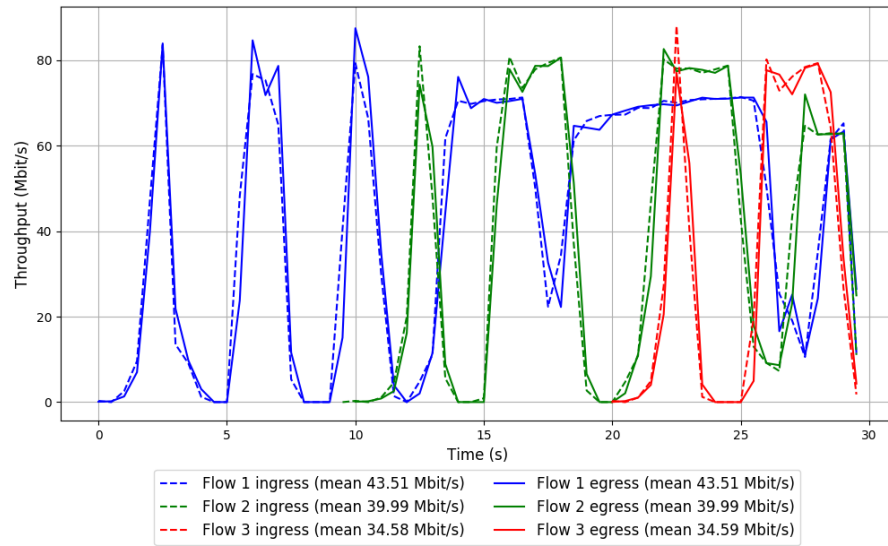
-- Flow 3:

Average throughput: 34.59 Mbit/s

95th percentile per-packet one-way delay: 112.395 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-28 15:11:44

End at: 2018-02-28 15:12:14

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.00 Mbit/s

95th percentile per-packet one-way delay: 112.330 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.08 Mbit/s

95th percentile per-packet one-way delay: 111.366 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.80 Mbit/s

95th percentile per-packet one-way delay: 112.174 ms

Loss rate: 0.00%

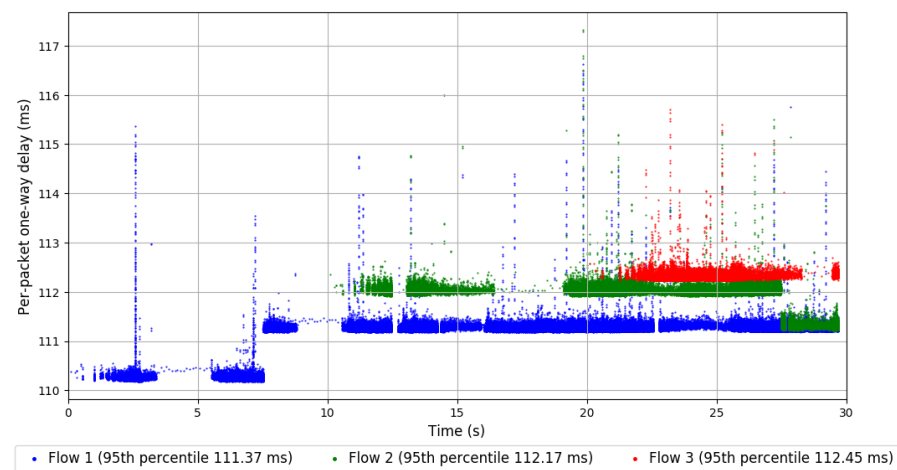
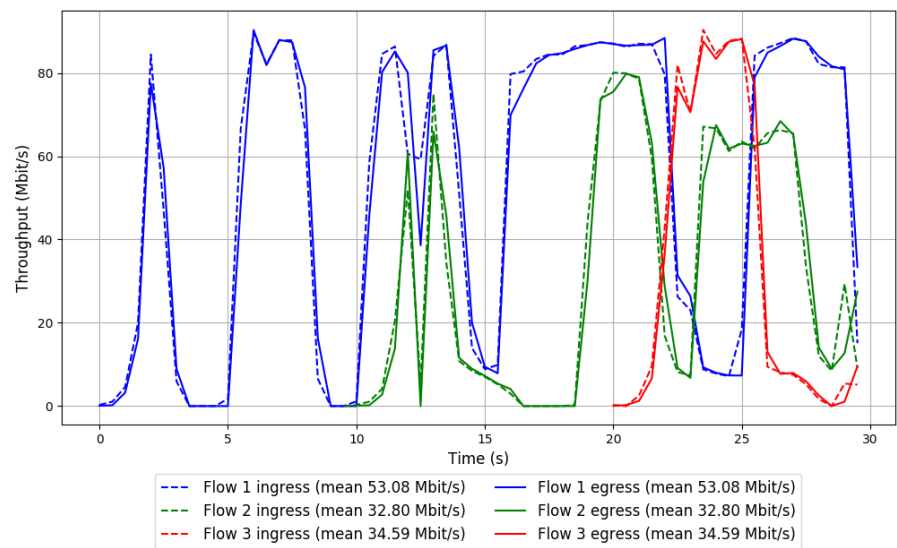
-- Flow 3:

Average throughput: 34.59 Mbit/s

95th percentile per-packet one-way delay: 112.448 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-28 15:31:49

End at: 2018-02-28 15:32:19

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.00 Mbit/s

95th percentile per-packet one-way delay: 112.190 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.58 Mbit/s

95th percentile per-packet one-way delay: 112.137 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.60 Mbit/s

95th percentile per-packet one-way delay: 110.433 ms

Loss rate: 0.00%

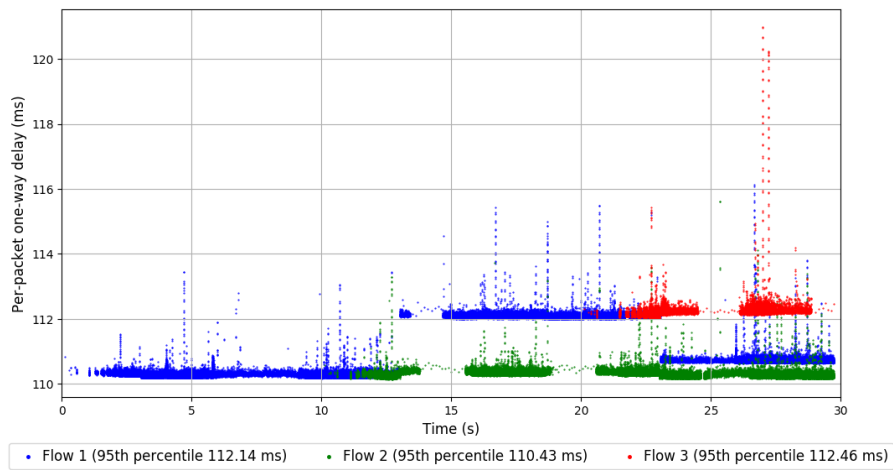
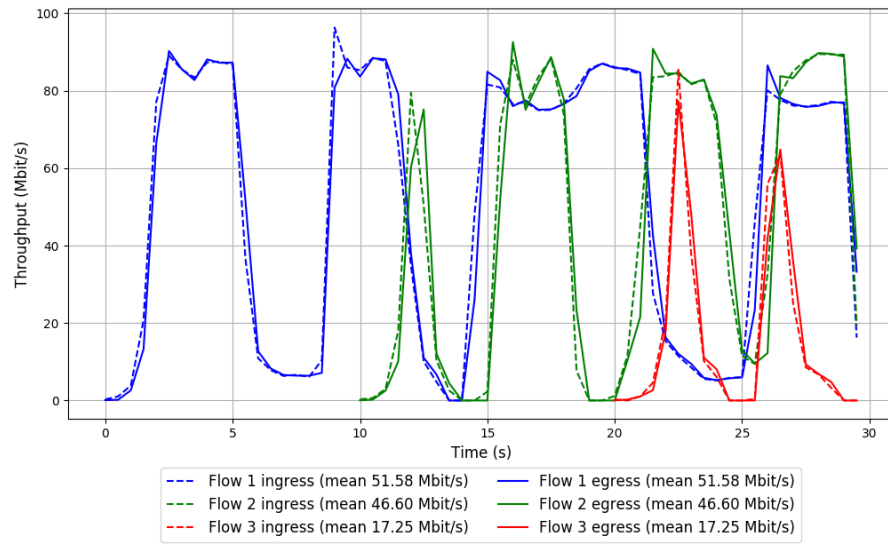
-- Flow 3:

Average throughput: 17.25 Mbit/s

95th percentile per-packet one-way delay: 112.463 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

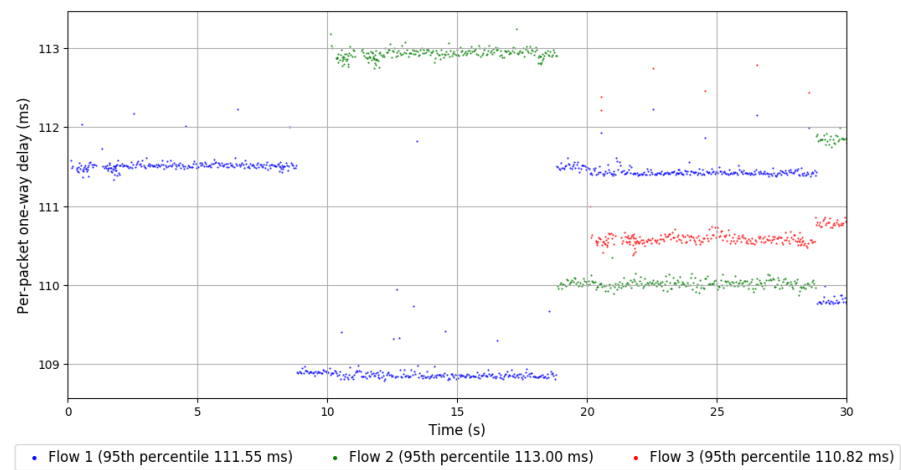
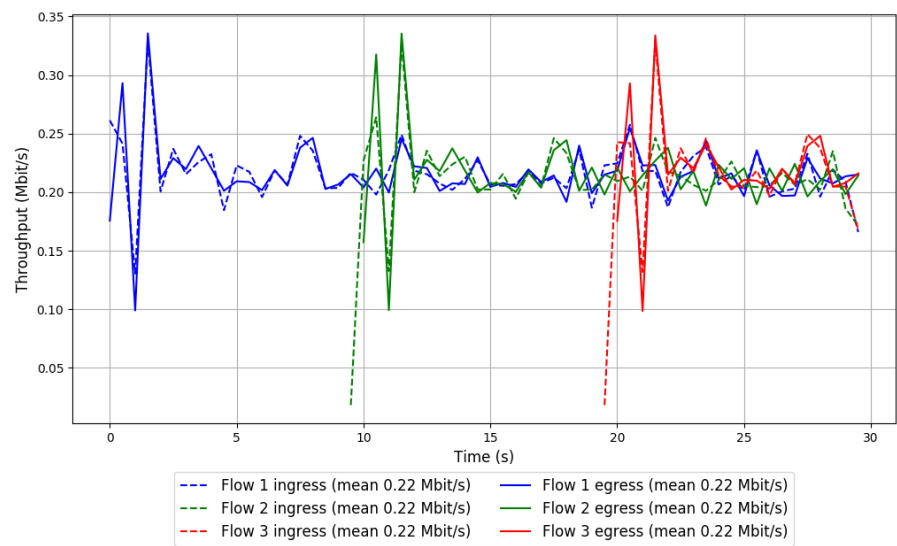


```
Run 1: Statistics of SCReAM

Start at: 2018-02-28 12:25:43
End at: 2018-02-28 12:26:13

# Below is generated by plot.py at 2018-02-28 18:06:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.960 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.552 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.995 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.820 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

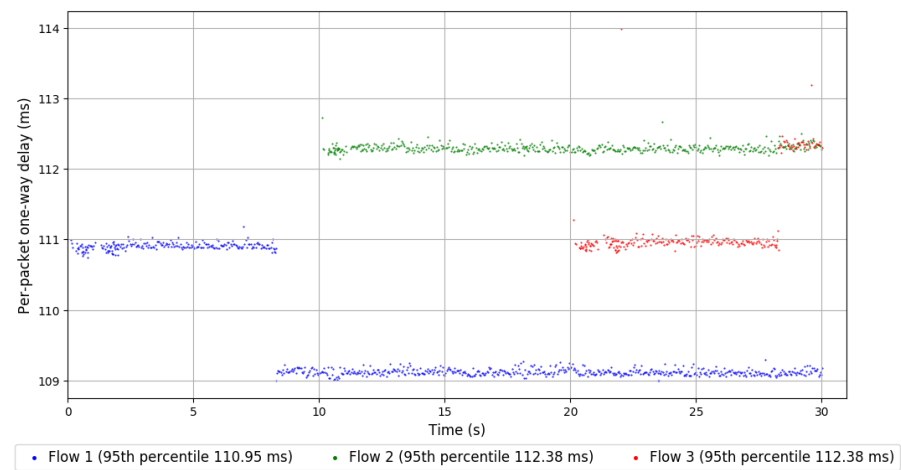
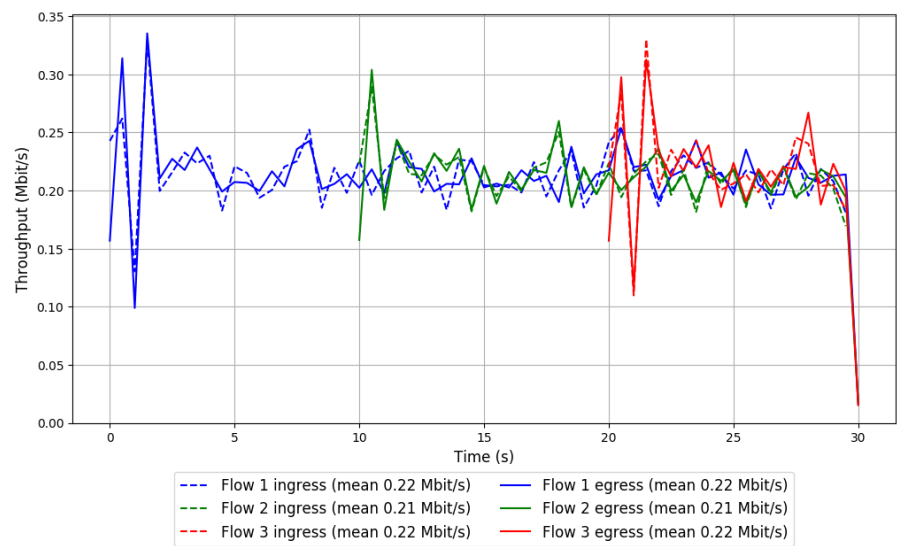


```
Run 2: Statistics of SCReAM

Start at: 2018-02-28 12:45:14
End at: 2018-02-28 12:45:44

# Below is generated by plot.py at 2018-02-28 18:06:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.347 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.946 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.376 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.380 ms
Loss rate: 0.00%
```

Run 2: Report of SCRaM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-28 13:05:02

End at: 2018-02-28 13:05:32

Below is generated by plot.py at 2018-02-28 18:06:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.444 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.026 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.479 ms

Loss rate: 0.00%

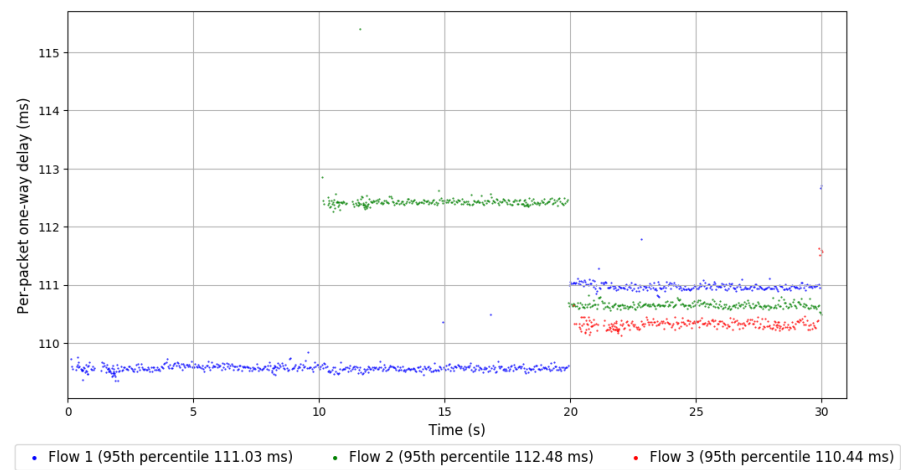
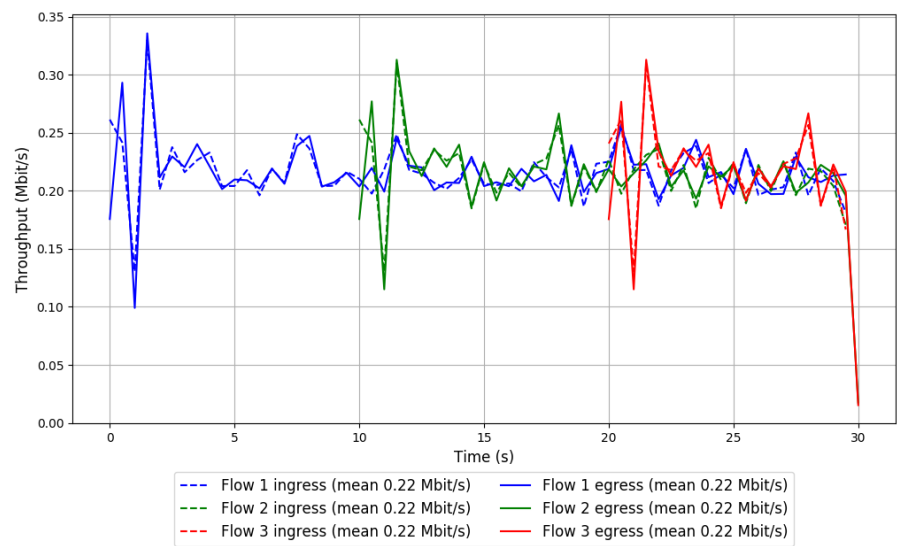
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.436 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-28 13:24:49

End at: 2018-02-28 13:25:19

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 112.240 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.244 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.364 ms

Loss rate: 0.00%

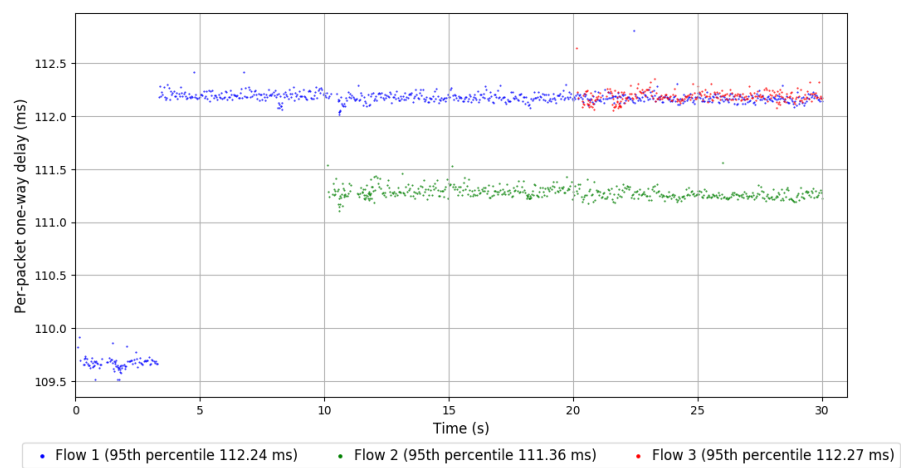
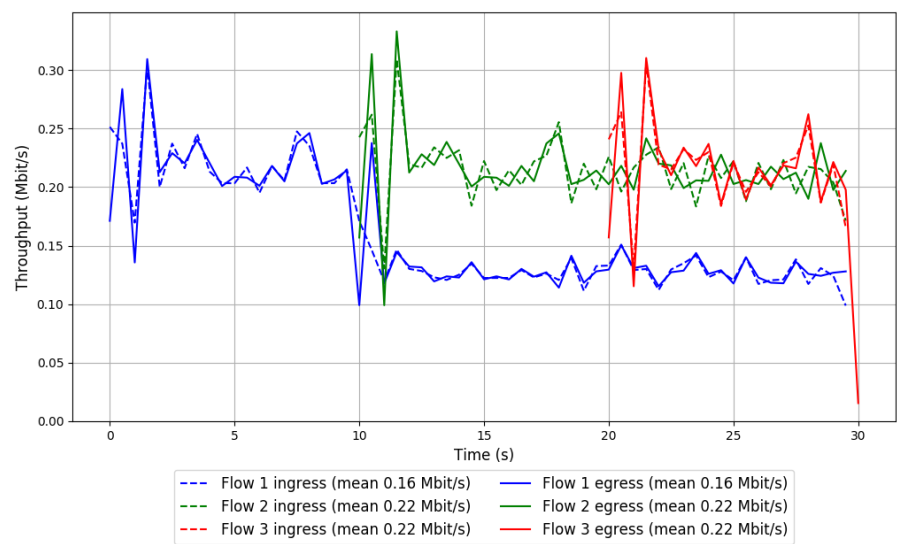
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.267 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-28 13:44:46

End at: 2018-02-28 13:45:16

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.287 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 110.818 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.316 ms

Loss rate: 0.00%

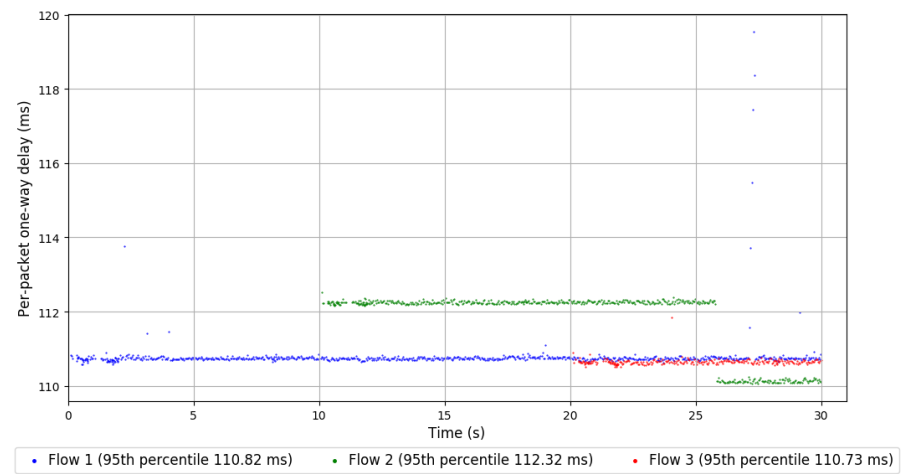
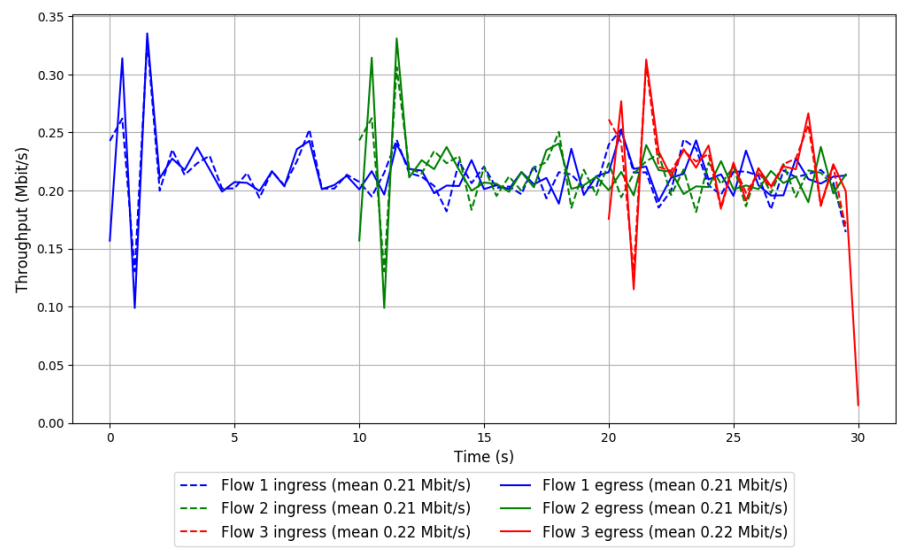
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.729 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-28 14:04:38

End at: 2018-02-28 14:05:08

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.642 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.605 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.867 ms

Loss rate: 0.00%

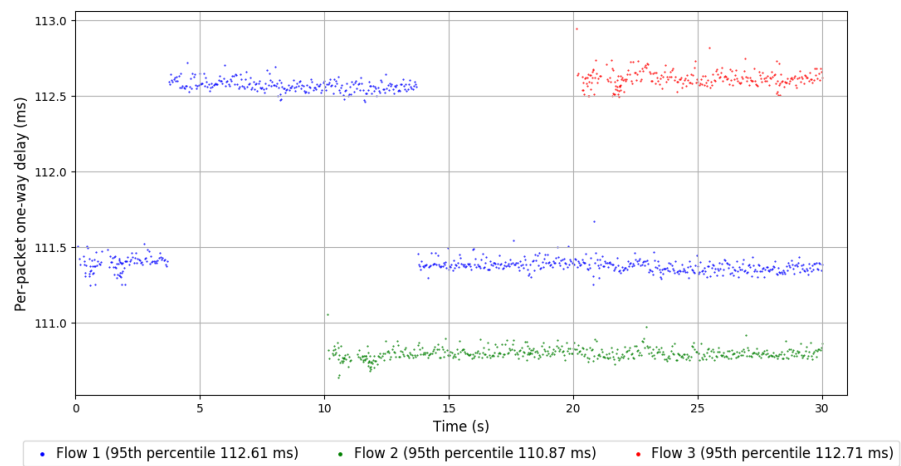
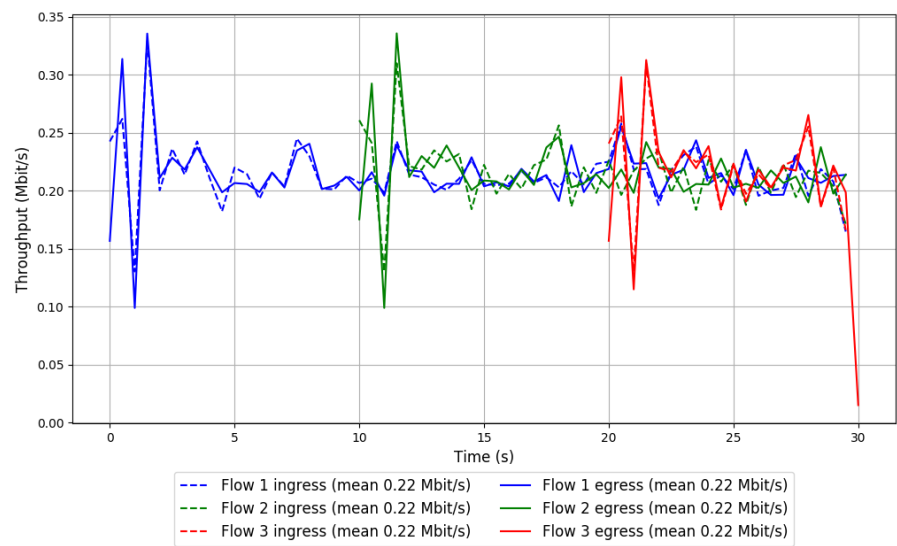
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.708 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-02-28 14:24:26

End at: 2018-02-28 14:24:56

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 112.181 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 111.674 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.497 ms

Loss rate: 0.00%

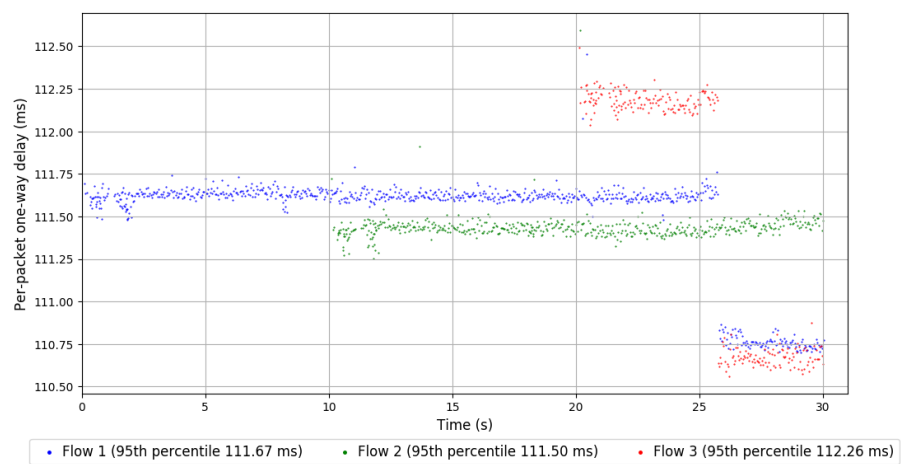
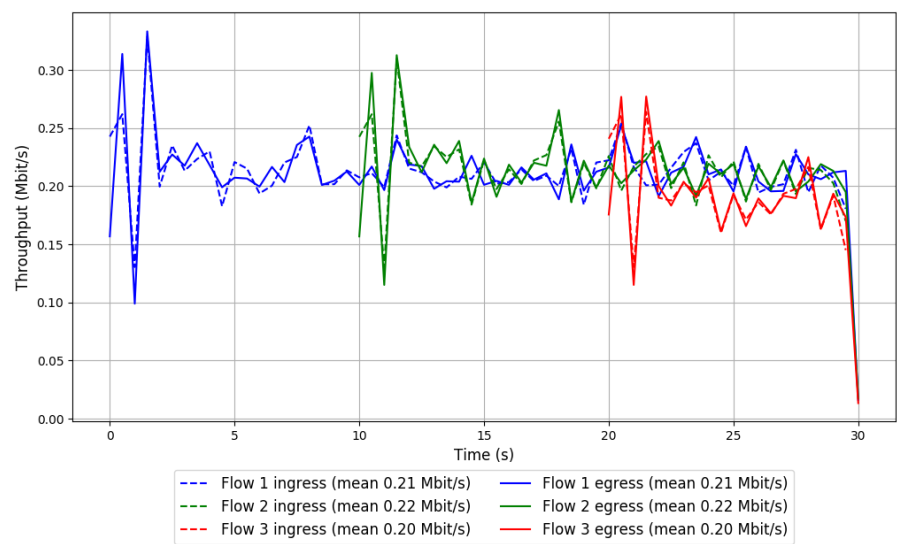
-- Flow 3:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 112.258 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-28 14:44:22

End at: 2018-02-28 14:44:52

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 112.653 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.644 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 0.00%

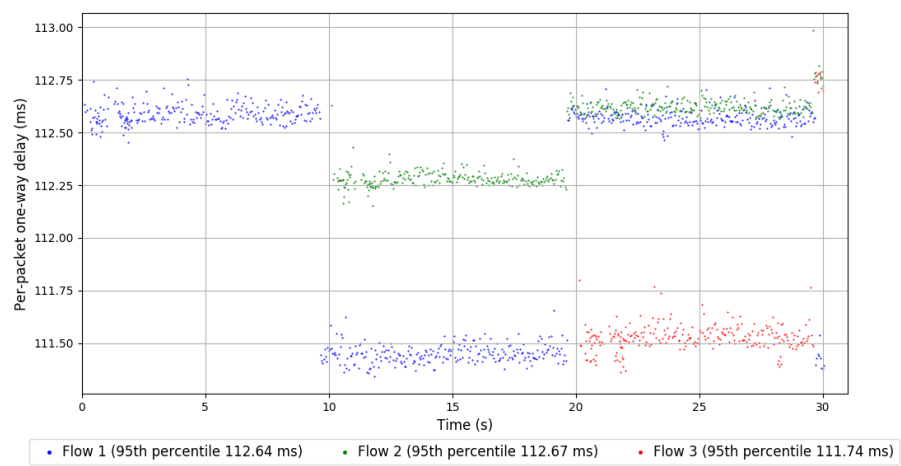
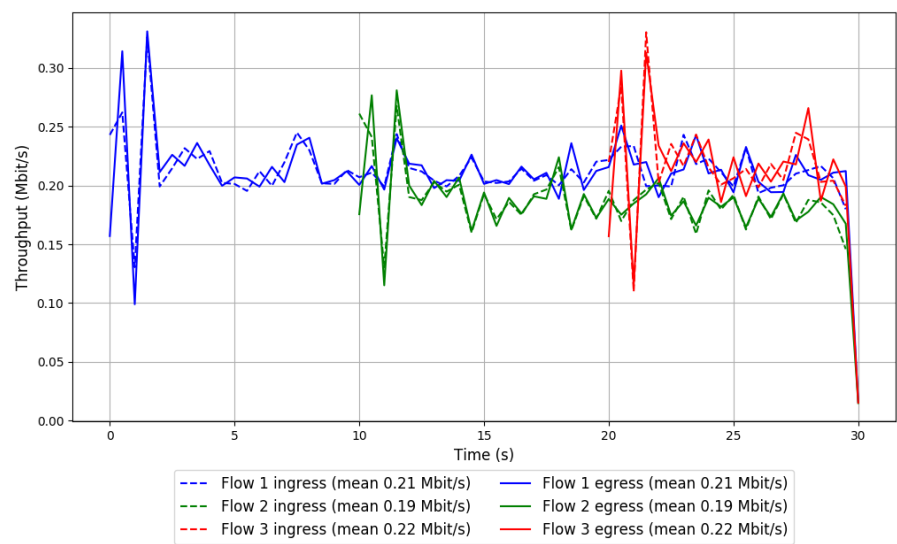
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.736 ms

Loss rate: 0.00%

Run 8: Report of SCRaM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-02-28 15:03:56

End at: 2018-02-28 15:04:26

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.491 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.287 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.442 ms

Loss rate: 0.00%

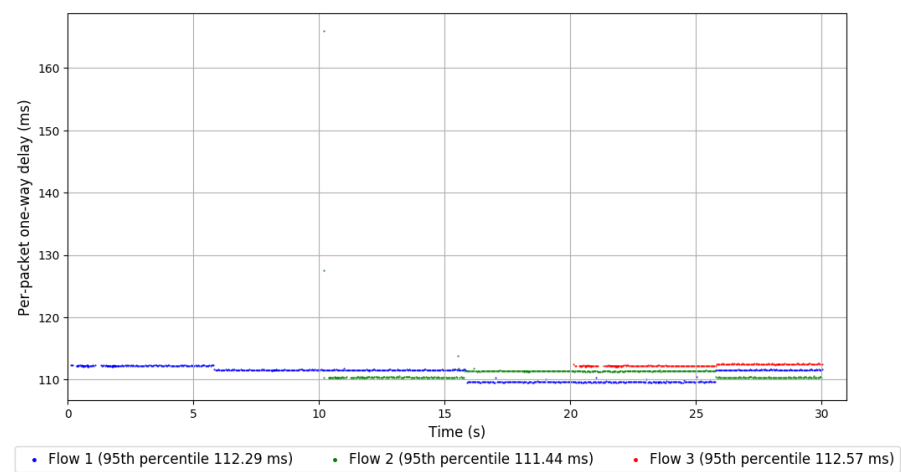
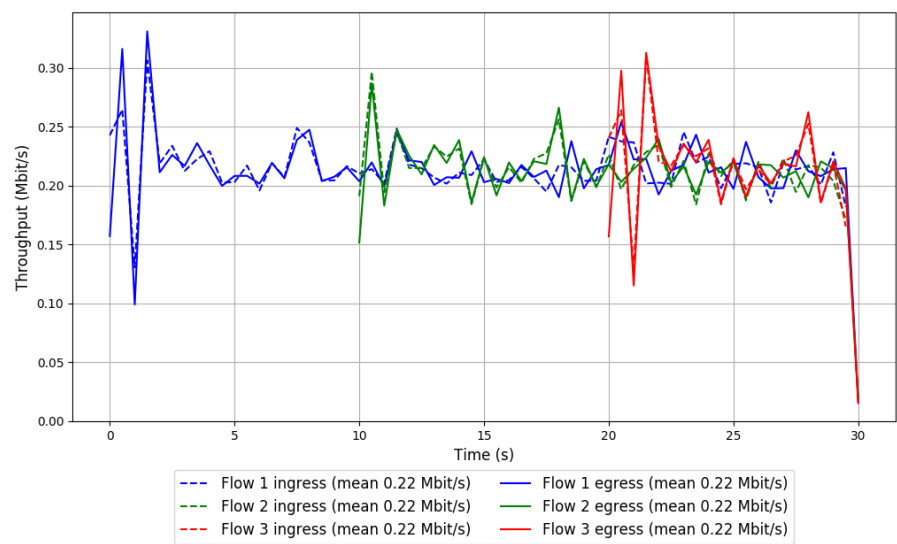
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.566 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

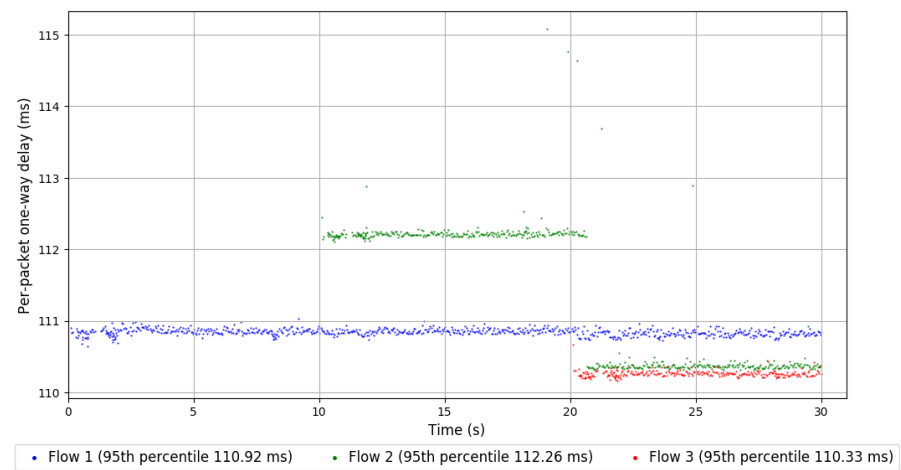
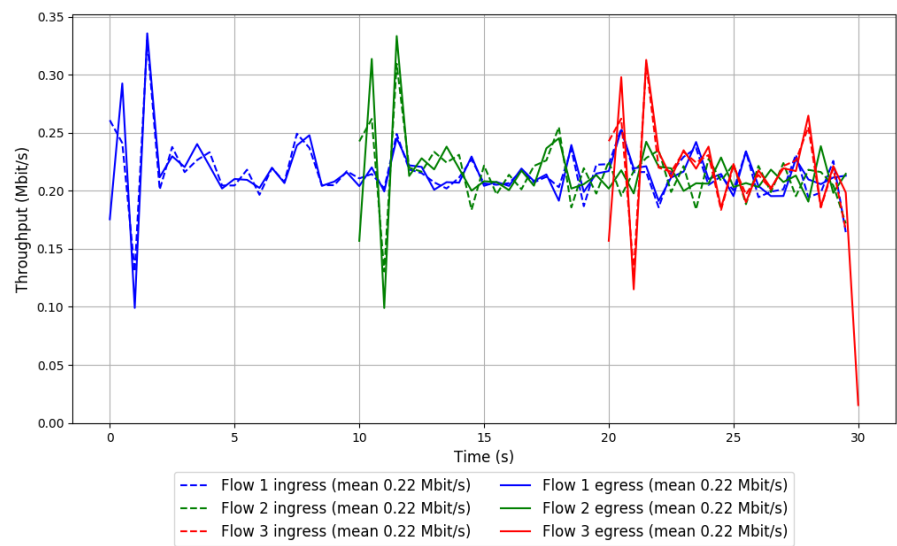


```
Run 10: Statistics of SReAM

Start at: 2018-02-28 15:24:41
End at: 2018-02-28 15:25:11

# Below is generated by plot.py at 2018-02-28 18:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.229 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.919 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.260 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.335 ms
Loss rate: 0.00%
```

Run 10: Report of SCRaM — Data Link

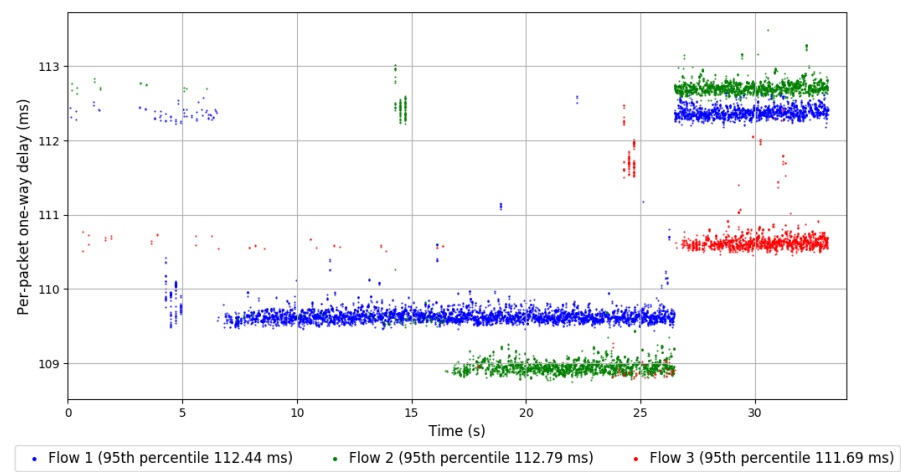
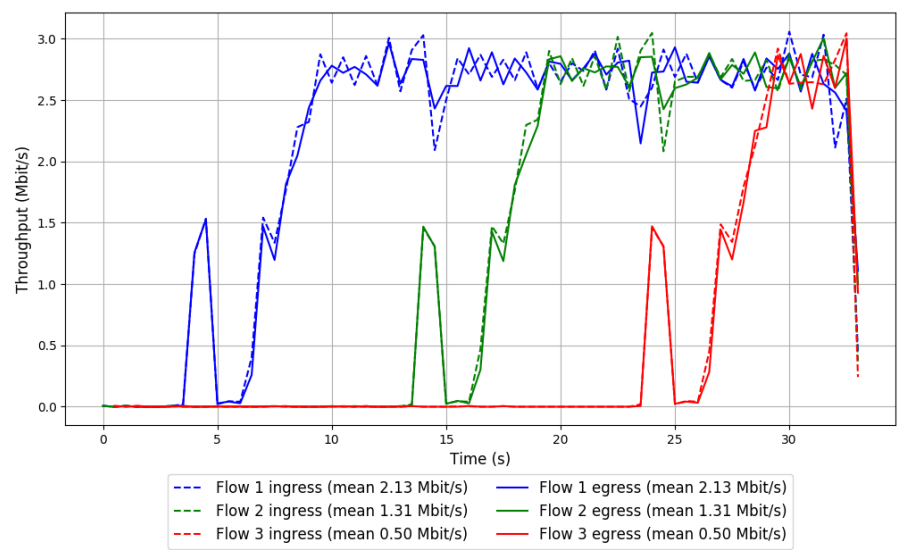


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-28 12:21:19
End at: 2018-02-28 12:21:49

# Below is generated by plot.py at 2018-02-28 18:06:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 112.730 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 112.439 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 112.788 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 111.686 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-28 12:40:45

End at: 2018-02-28 12:41:15

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 112.944 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 112.983 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 112.392 ms

Loss rate: 0.02%

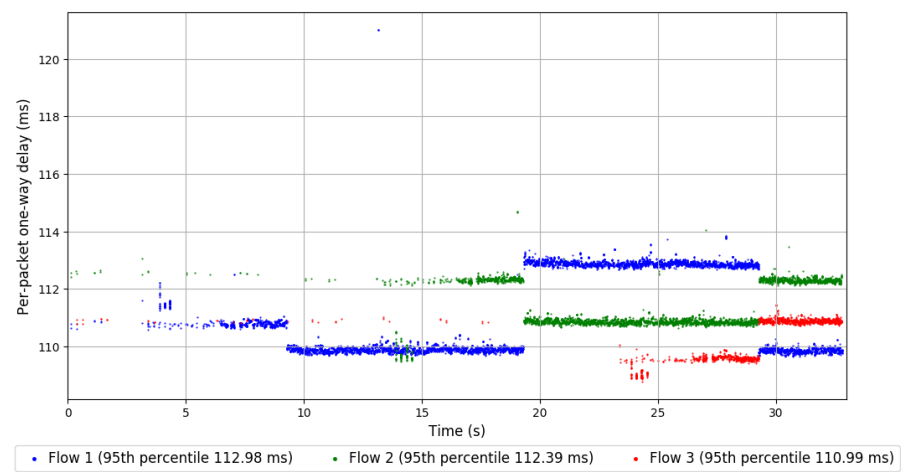
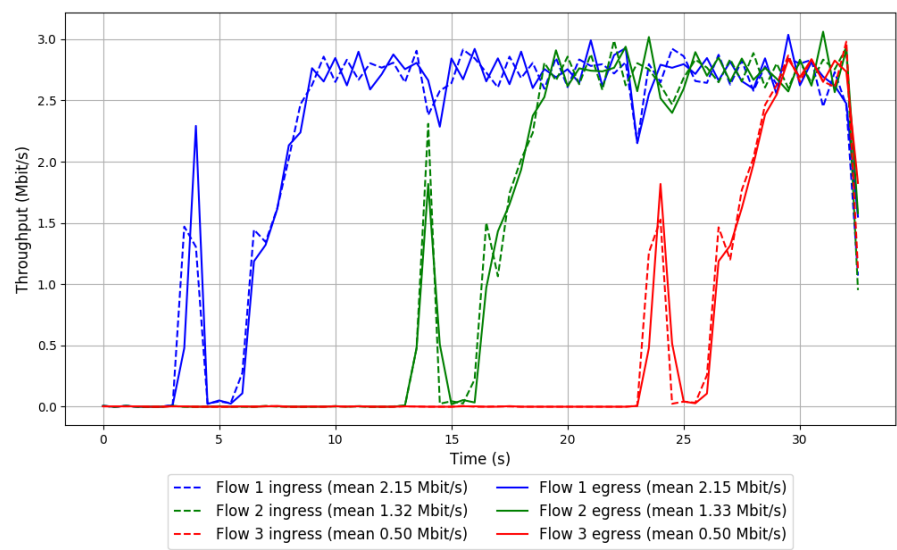
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 110.988 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-28 13:00:33

End at: 2018-02-28 13:01:03

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.812 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.806 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 111.742 ms

Loss rate: 0.00%

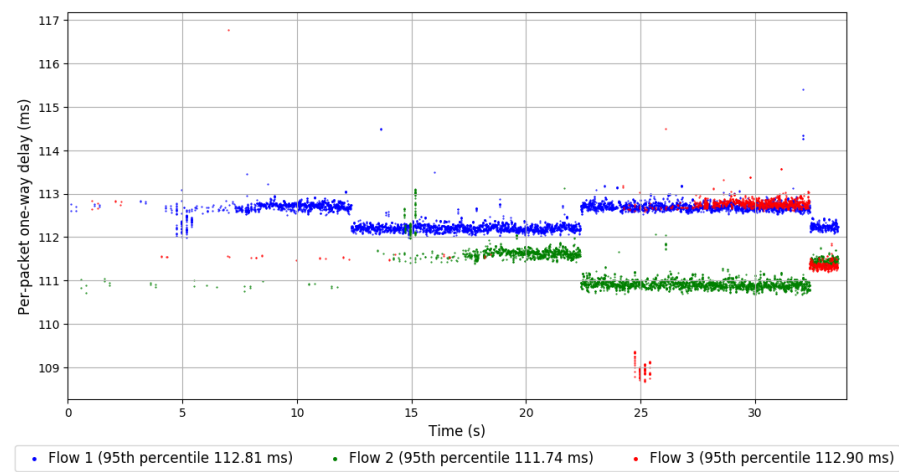
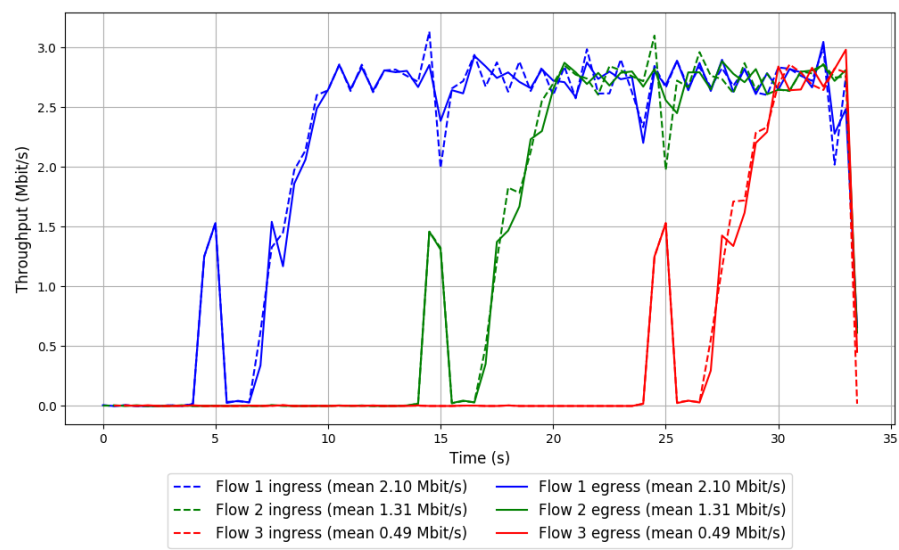
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 0.06%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-28 13:20:21

End at: 2018-02-28 13:20:51

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 112.508 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.357 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 112.572 ms

Loss rate: 0.00%

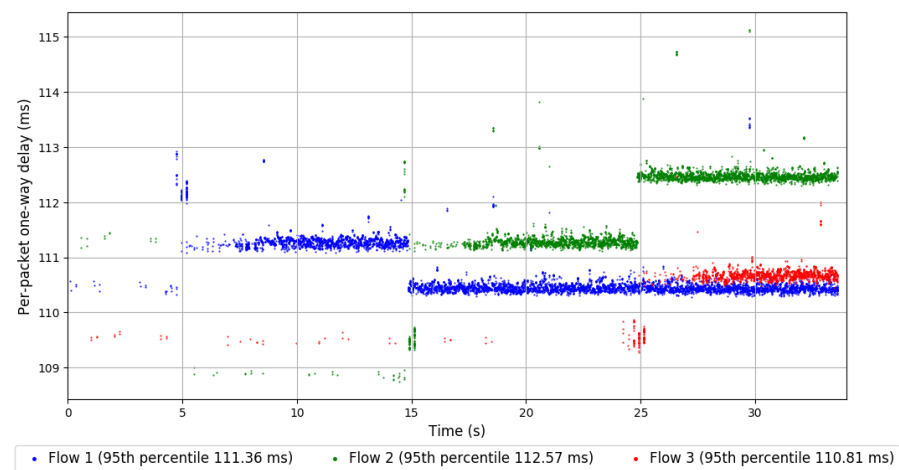
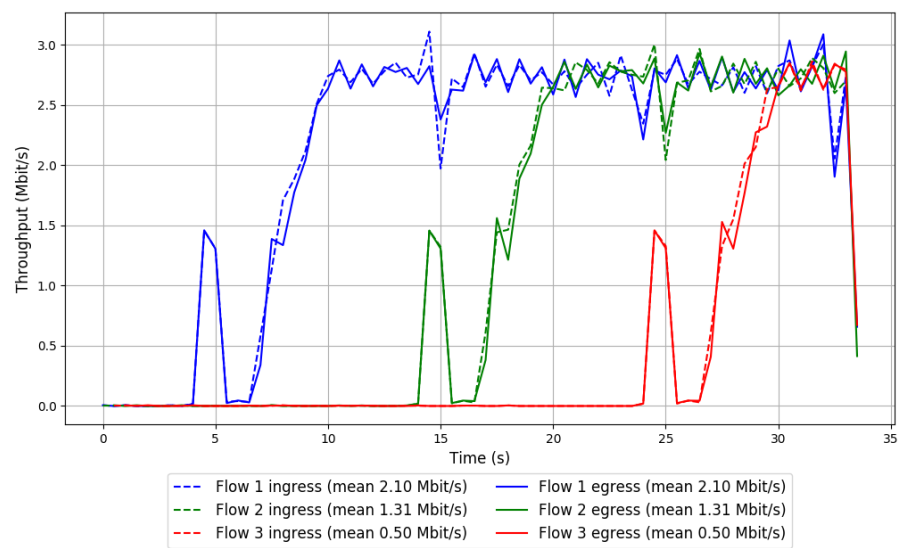
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 110.810 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-28 13:40:07

End at: 2018-02-28 13:40:37

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 112.047 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.070 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 111.500 ms

Loss rate: 0.00%

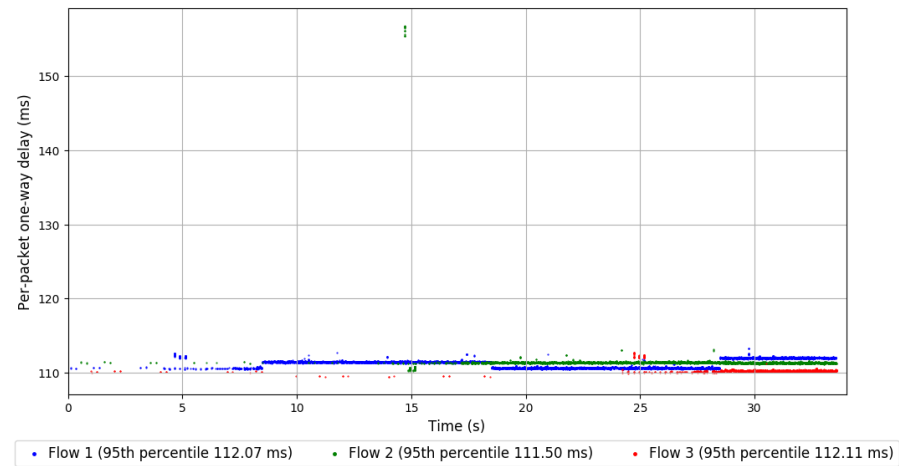
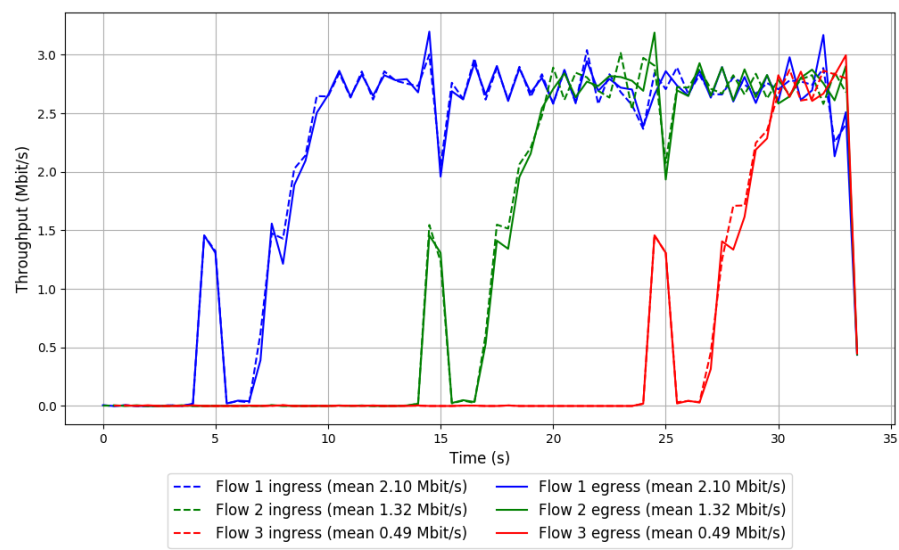
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.111 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-28 14:00:10

End at: 2018-02-28 14:00:40

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.616 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.447 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 112.680 ms

Loss rate: 0.00%

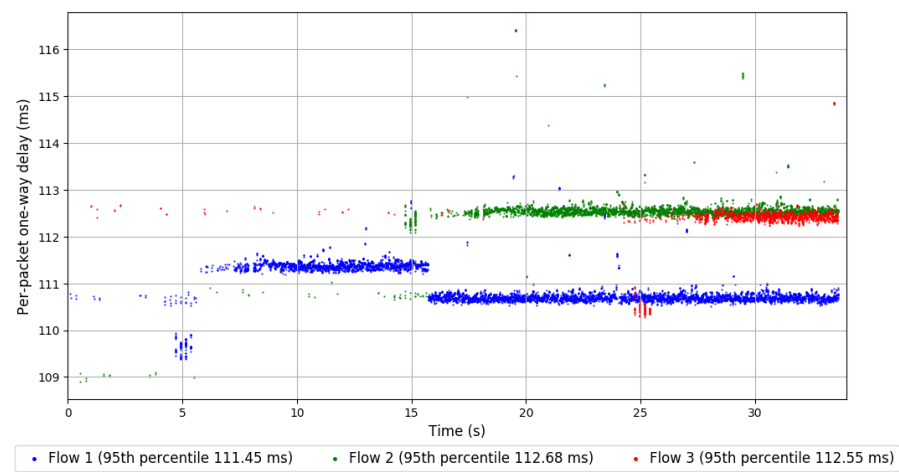
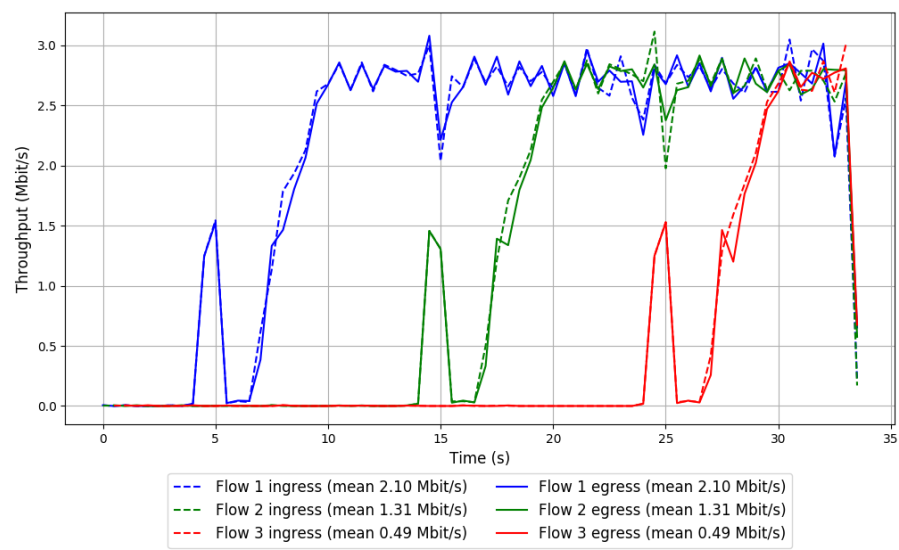
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.546 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-28 14:20:02

End at: 2018-02-28 14:20:32

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.488 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.689 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 111.739 ms

Loss rate: 0.00%

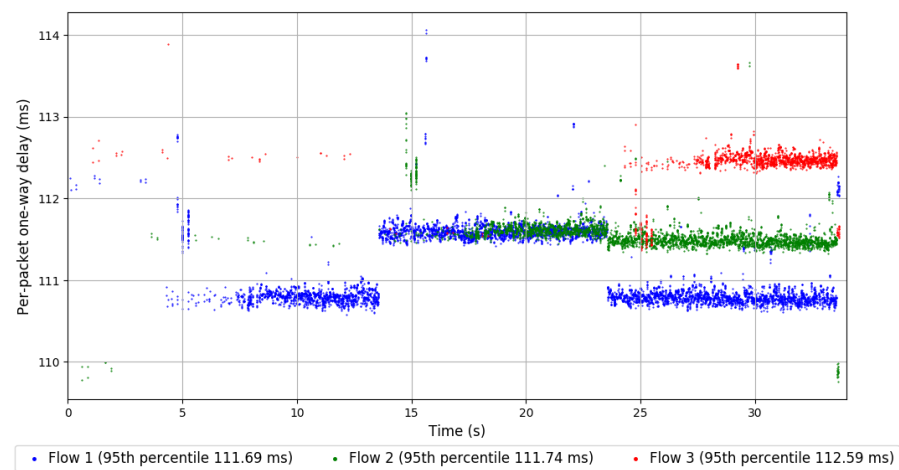
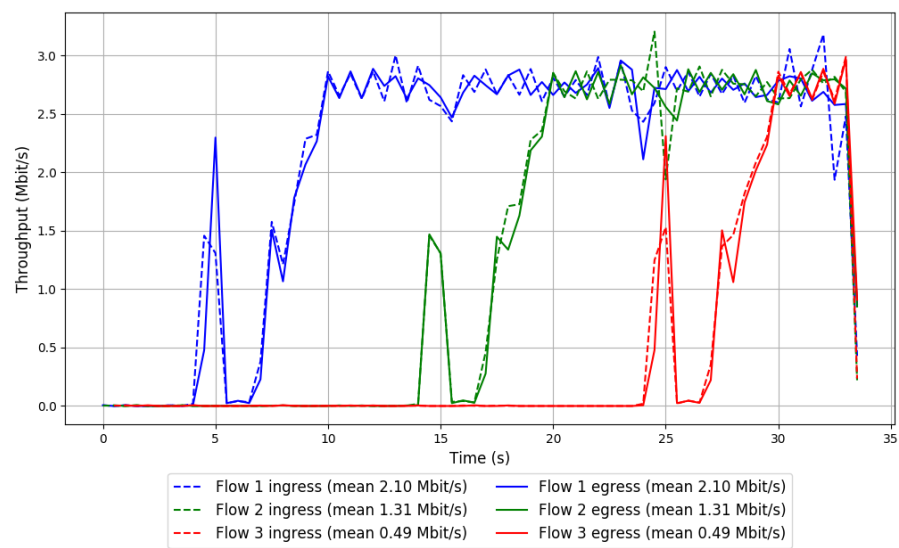
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.593 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-28 14:39:55

End at: 2018-02-28 14:40:25

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 112.735 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.694 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 112.781 ms

Loss rate: 0.00%

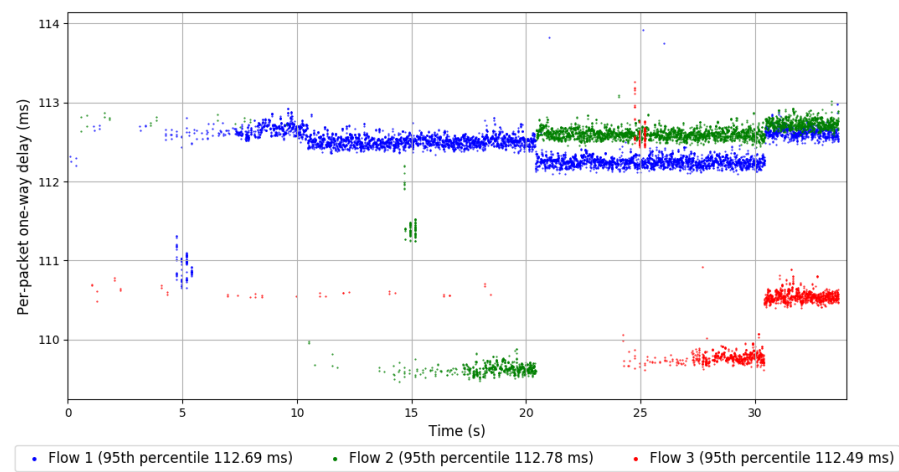
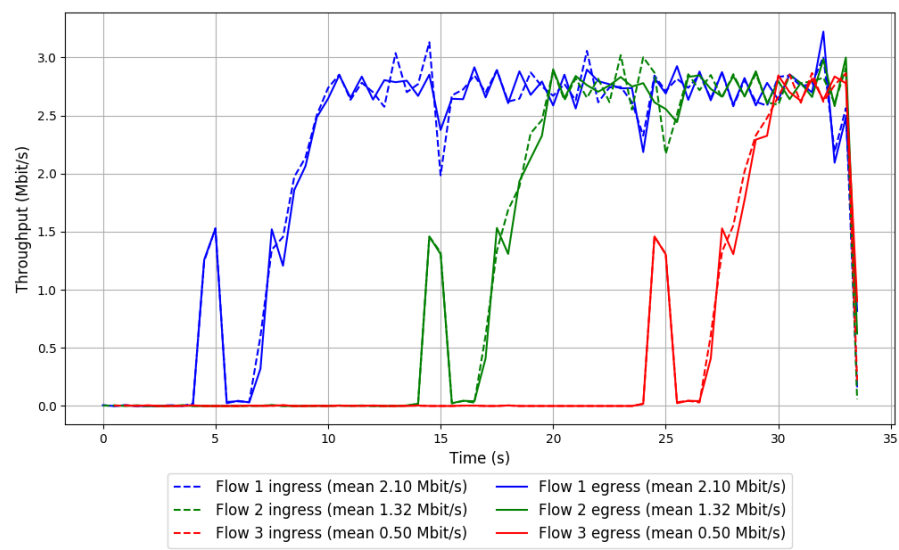
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 112.492 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-28 14:59:21

End at: 2018-02-28 14:59:51

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 111.659 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.683 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 111.504 ms

Loss rate: 0.00%

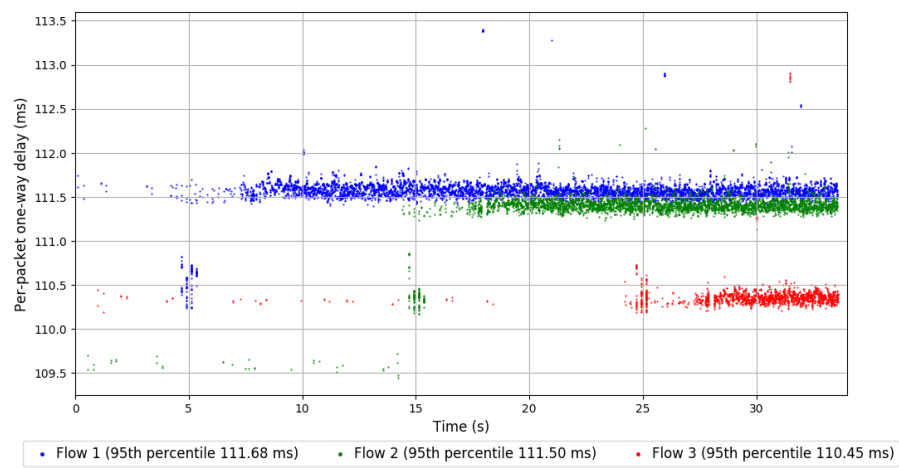
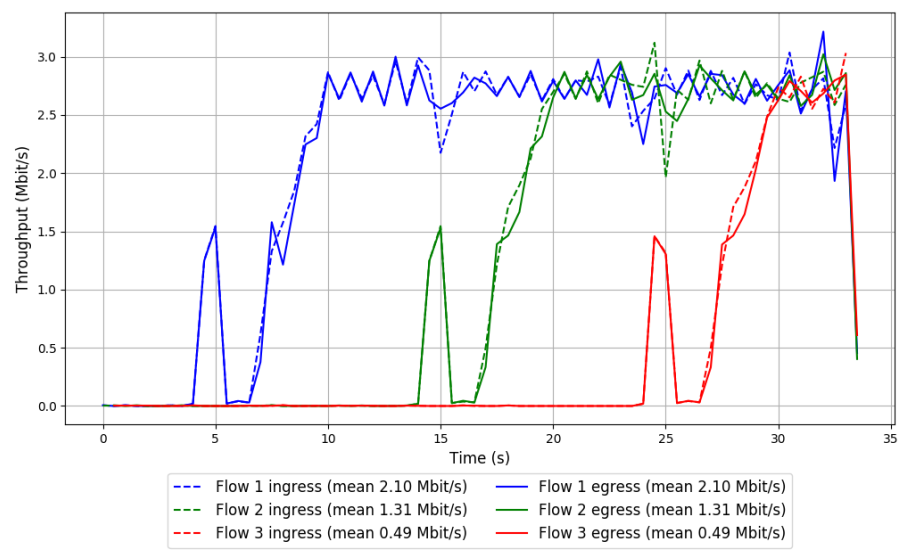
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 110.454 ms

Loss rate: 0.06%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-28 15:20:10

End at: 2018-02-28 15:20:40

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 112.767 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.799 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 109.707 ms

Loss rate: 0.02%

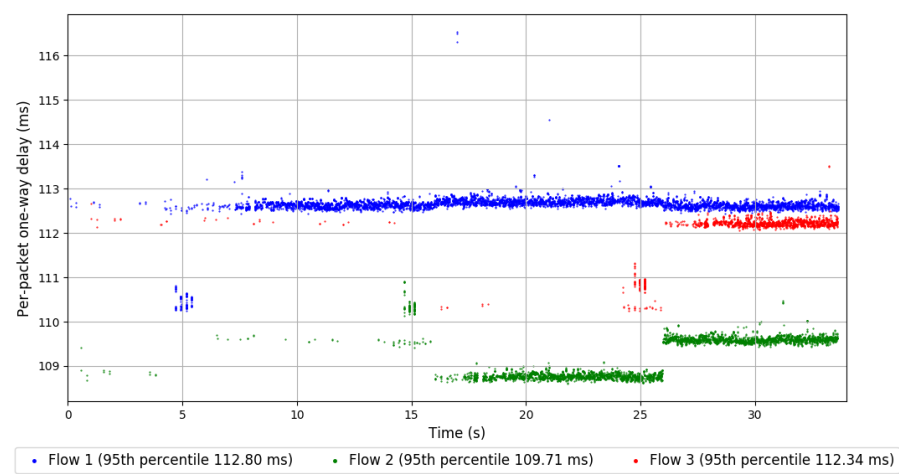
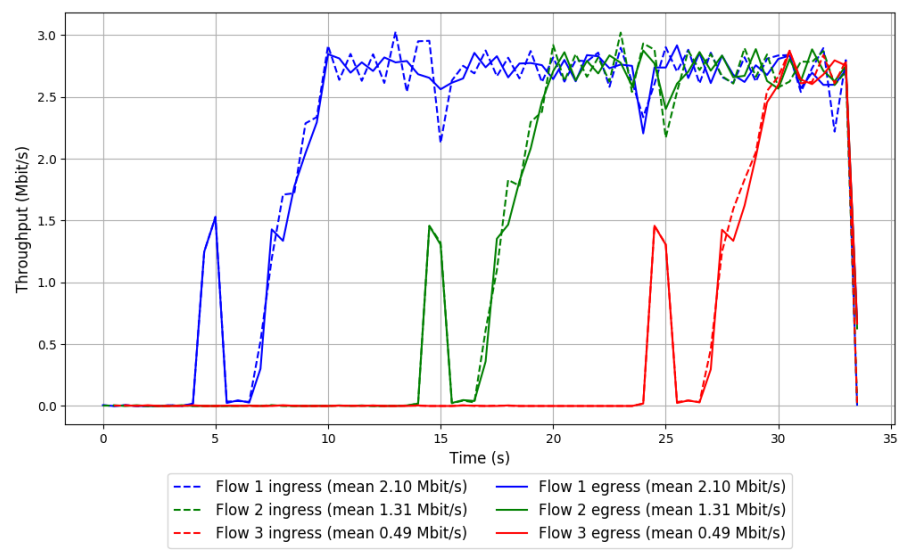
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 112.340 ms

Loss rate: 0.06%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-28 12:37:06

End at: 2018-02-28 12:37:36

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.53 Mbit/s

95th percentile per-packet one-way delay: 112.527 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 112.474 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 112.649 ms

Loss rate: 0.00%

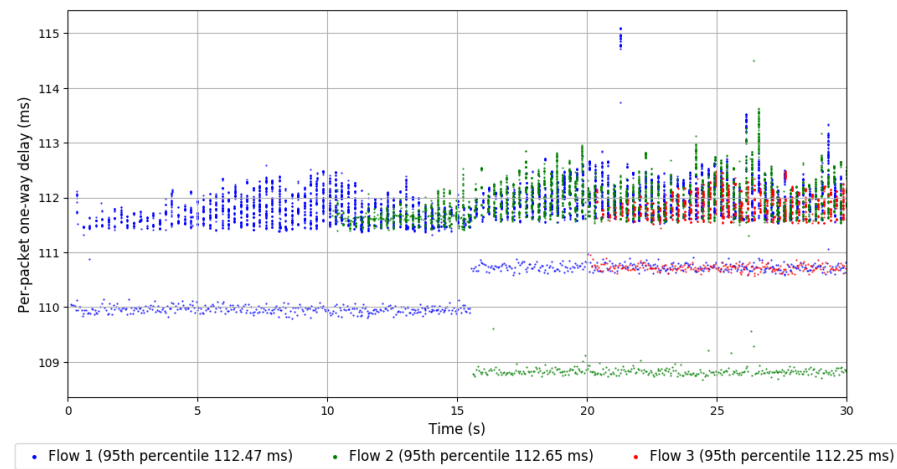
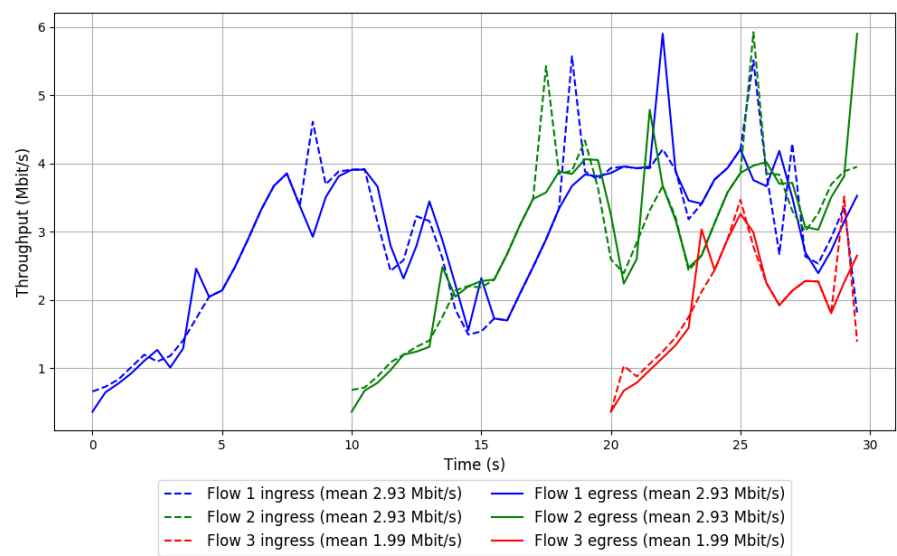
-- Flow 3:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 112.249 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-28 12:56:34

End at: 2018-02-28 12:57:04

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.99 Mbit/s

95th percentile per-packet one-way delay: 113.180 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 113.142 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 113.241 ms

Loss rate: 0.00%

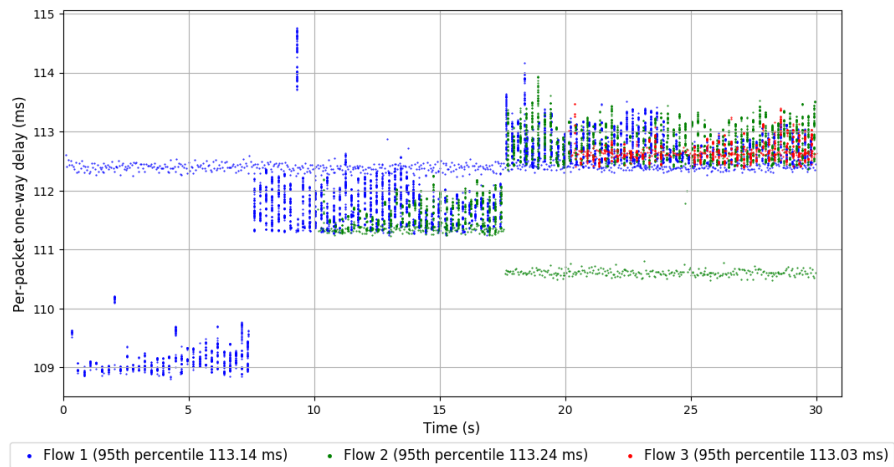
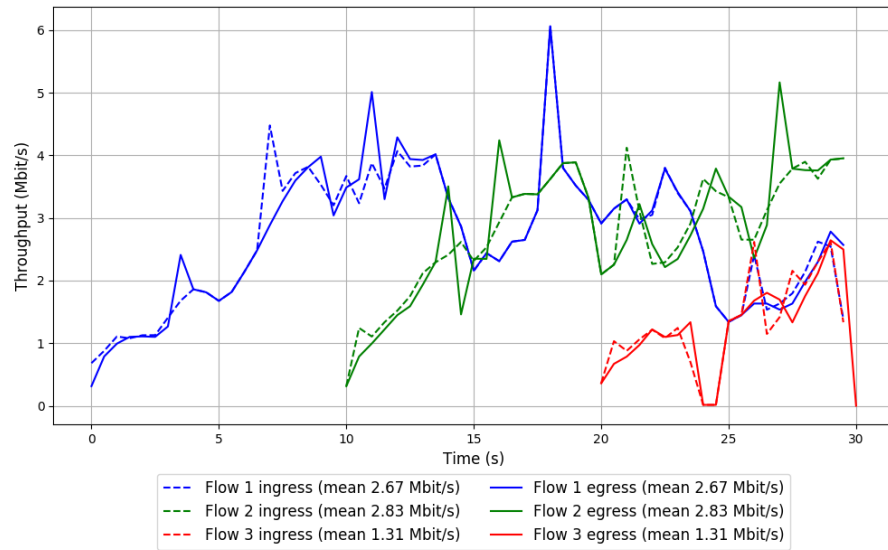
-- Flow 3:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 113.028 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-28 13:16:18

End at: 2018-02-28 13:16:48

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 113.157 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 113.173 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 113.193 ms

Loss rate: 0.00%

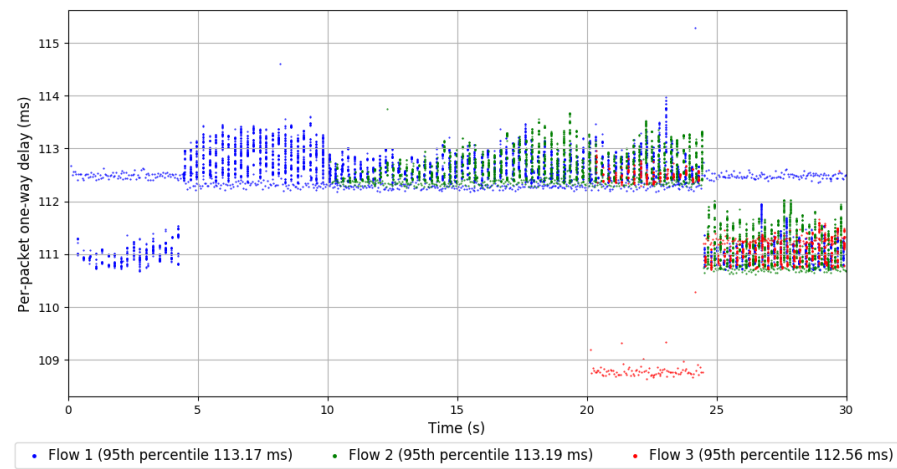
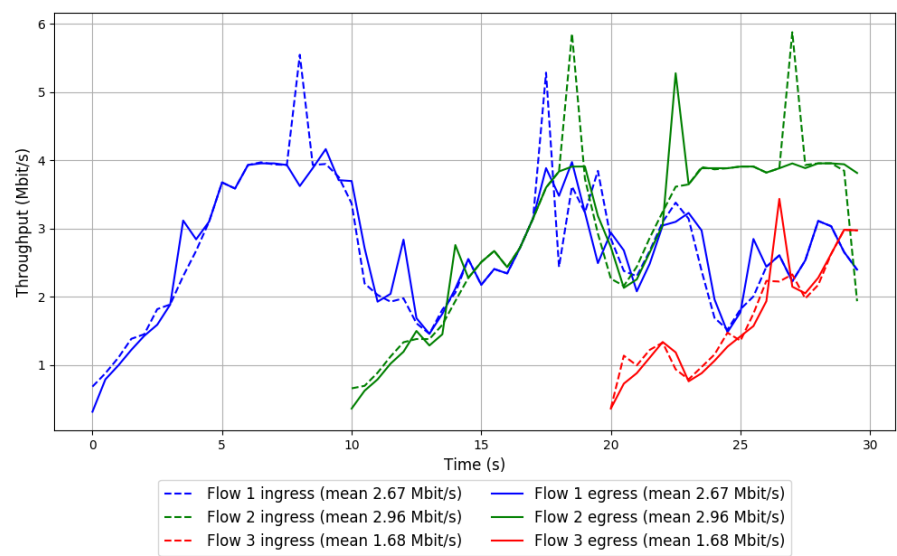
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 112.560 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-28 13:36:11

End at: 2018-02-28 13:36:41

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 111.454 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 111.483 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 111.269 ms

Loss rate: 0.00%

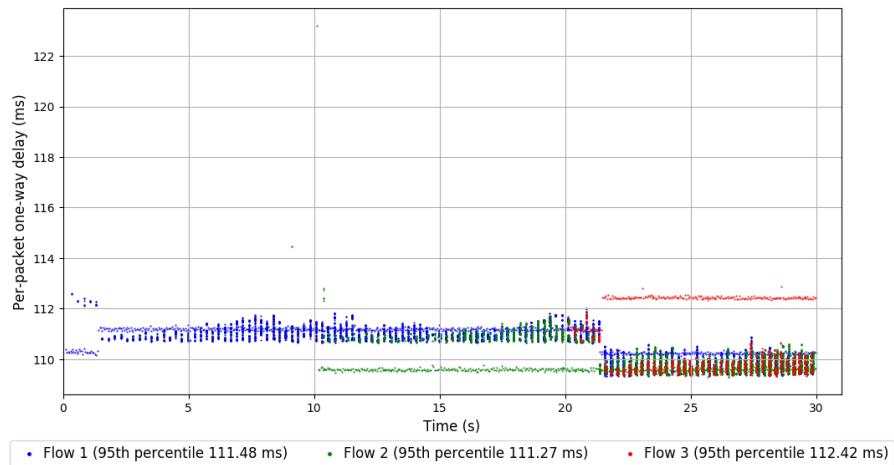
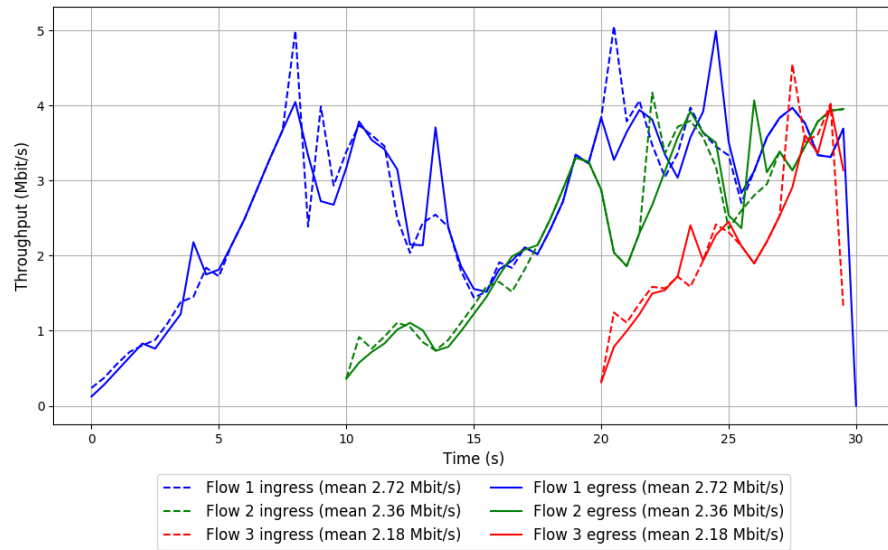
-- Flow 3:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 112.421 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-28 13:56:06

End at: 2018-02-28 13:56:36

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.688 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 112.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.86 Mbit/s

95th percentile per-packet one-way delay: 112.507 ms

Loss rate: 0.00%

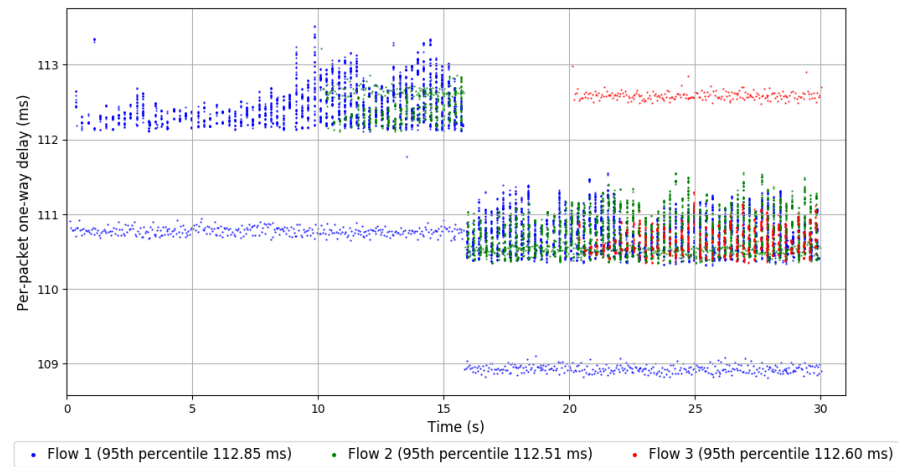
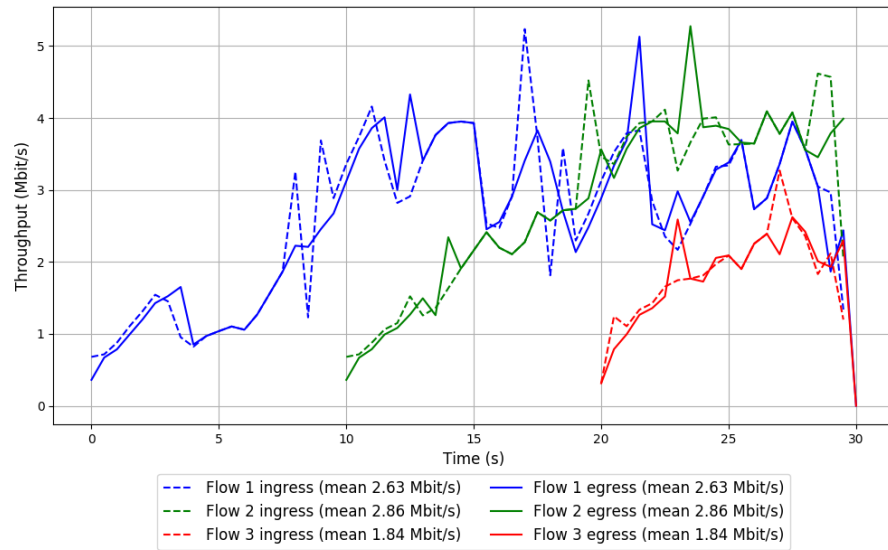
-- Flow 3:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 112.598 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-28 14:16:02

End at: 2018-02-28 14:16:32

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.93 Mbit/s

95th percentile per-packet one-way delay: 112.924 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.20 Mbit/s

95th percentile per-packet one-way delay: 113.063 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 112.757 ms

Loss rate: 0.00%

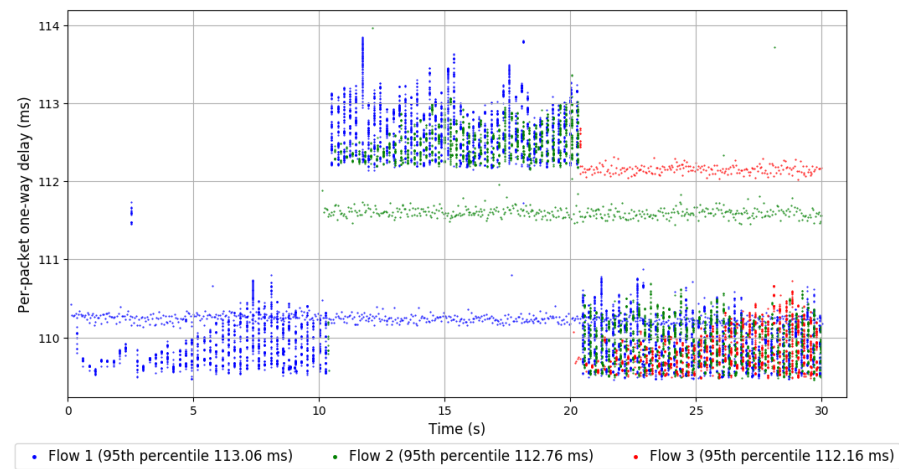
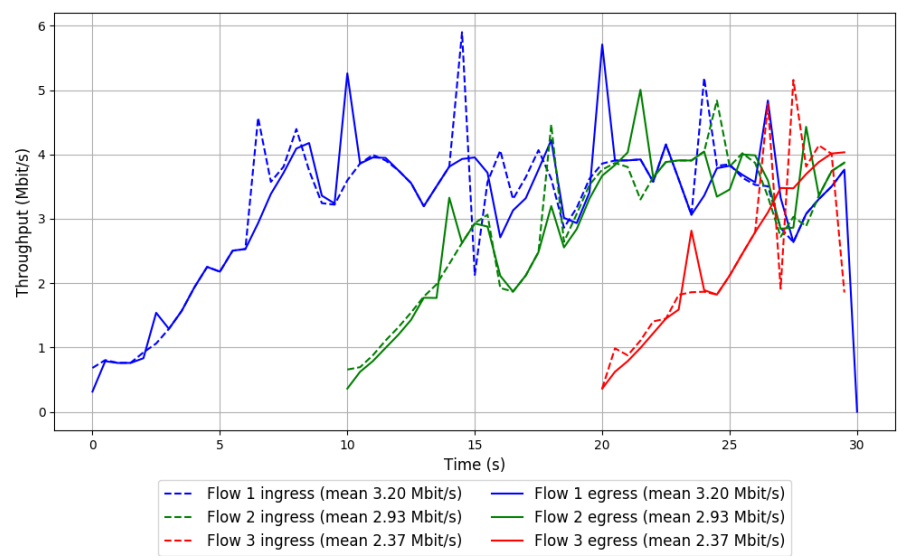
-- Flow 3:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 112.161 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-28 14:35:52

End at: 2018-02-28 14:36:22

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.83 Mbit/s

95th percentile per-packet one-way delay: 112.580 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 113.684 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 112.336 ms

Loss rate: 0.00%

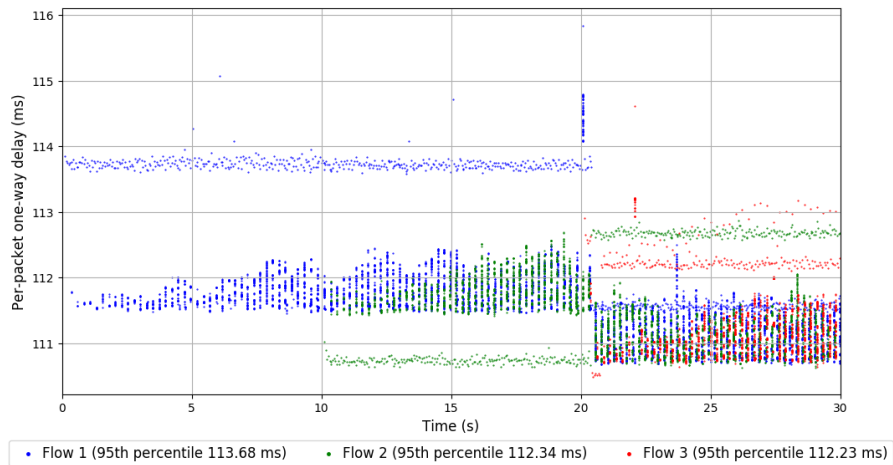
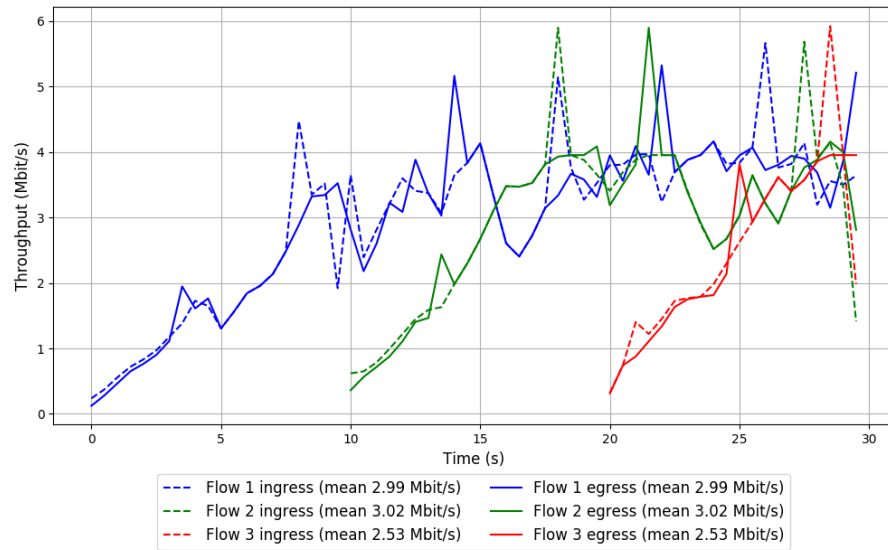
-- Flow 3:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 112.230 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-28 14:55:44

End at: 2018-02-28 14:56:14

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.89 Mbit/s

95th percentile per-packet one-way delay: 113.194 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 113.236 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 113.189 ms

Loss rate: 0.00%

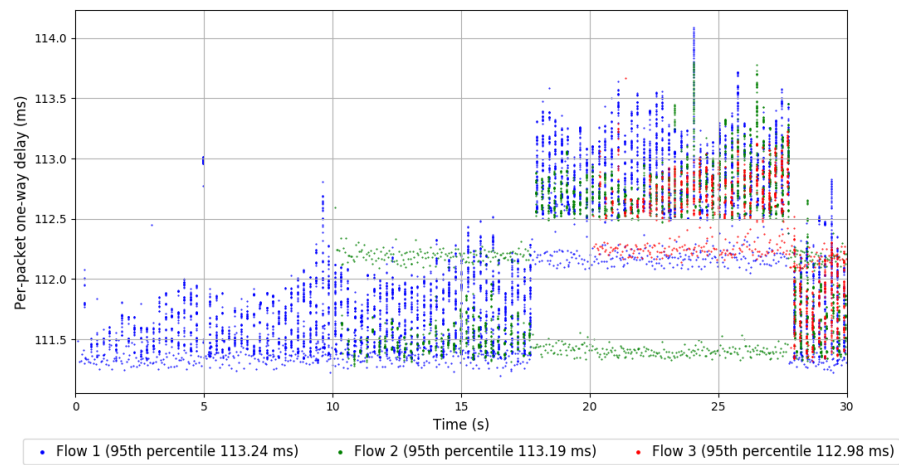
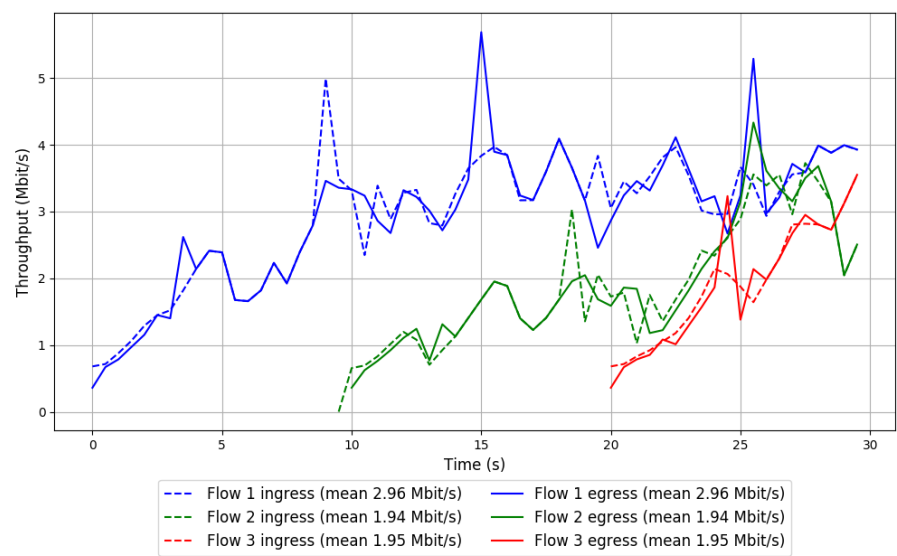
-- Flow 3:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 112.981 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-28 15:16:04

End at: 2018-02-28 15:16:34

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 111.707 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 112.127 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 111.636 ms

Loss rate: 0.00%

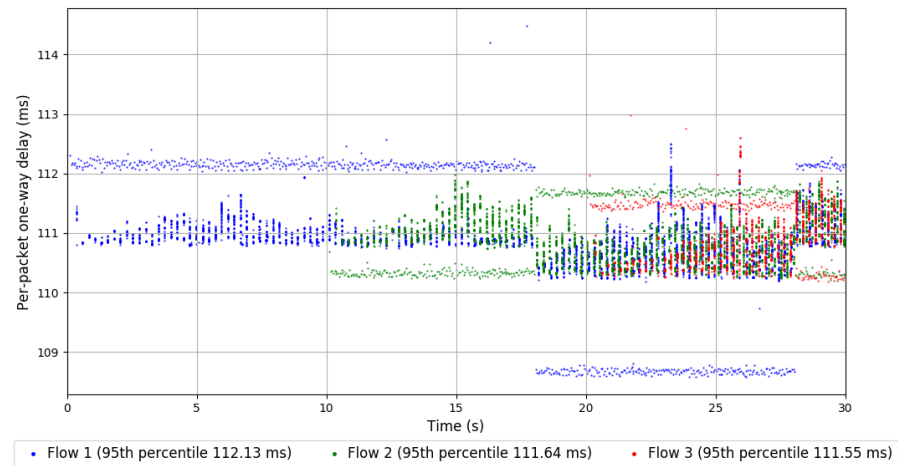
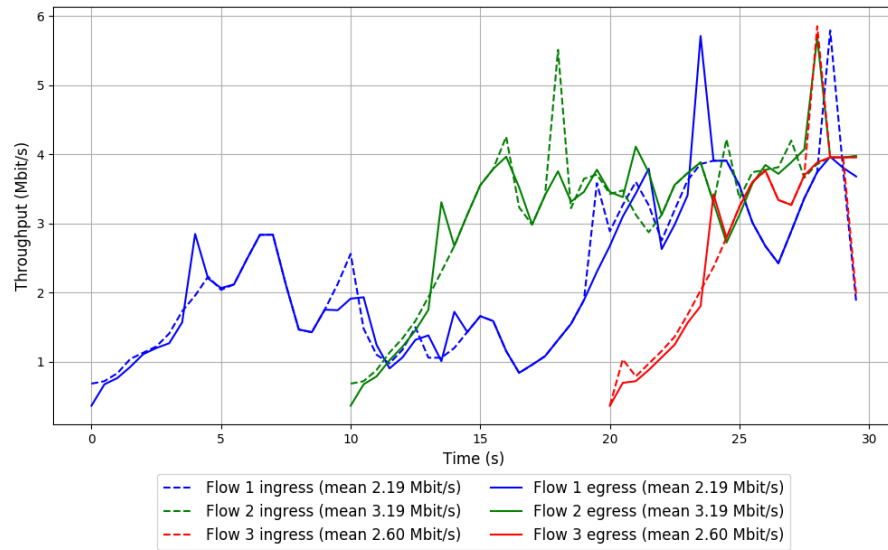
-- Flow 3:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 111.549 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-28 15:35:53

End at: 2018-02-28 15:36:23

Below is generated by plot.py at 2018-02-28 18:06:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.72 Mbit/s

95th percentile per-packet one-way delay: 112.852 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 112.952 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 111.777 ms

Loss rate: 0.00%

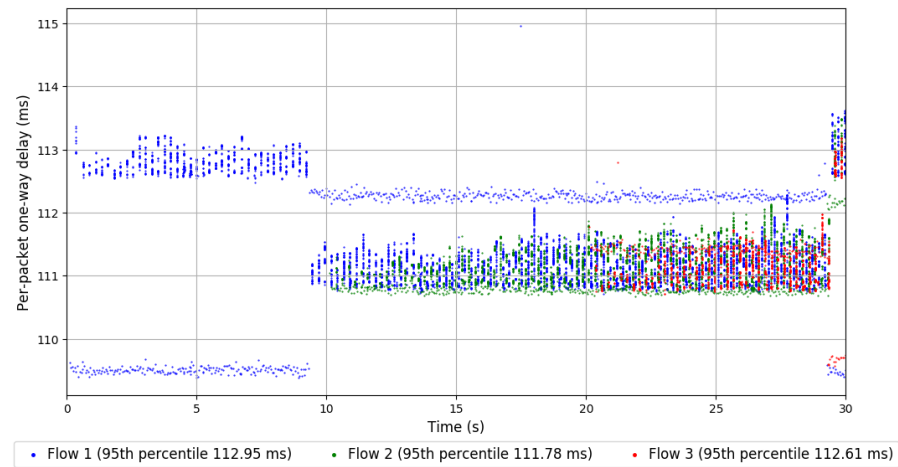
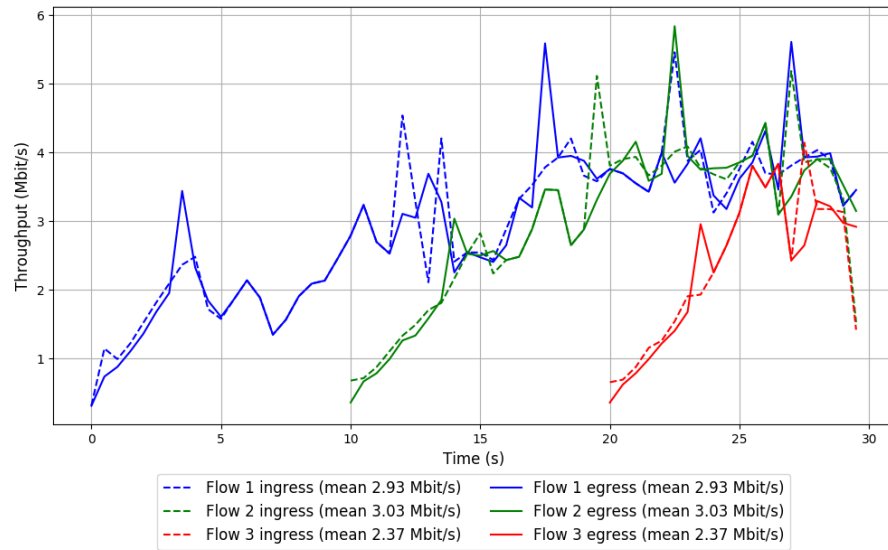
-- Flow 3:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 112.614 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

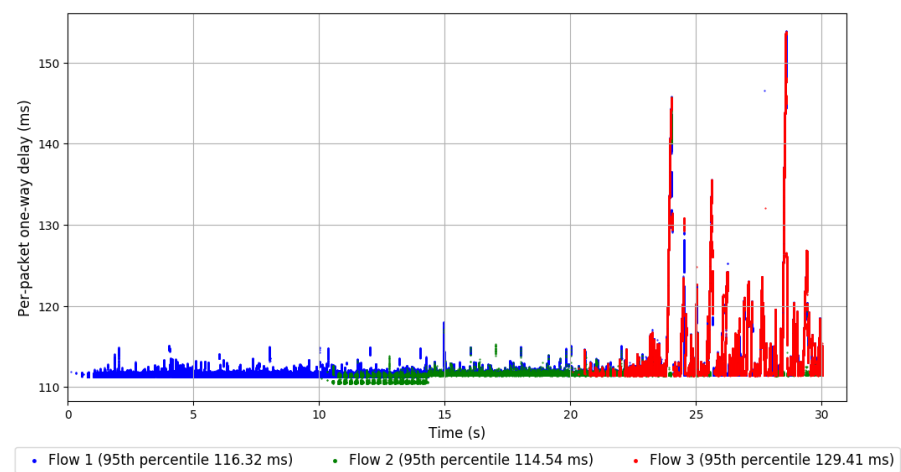
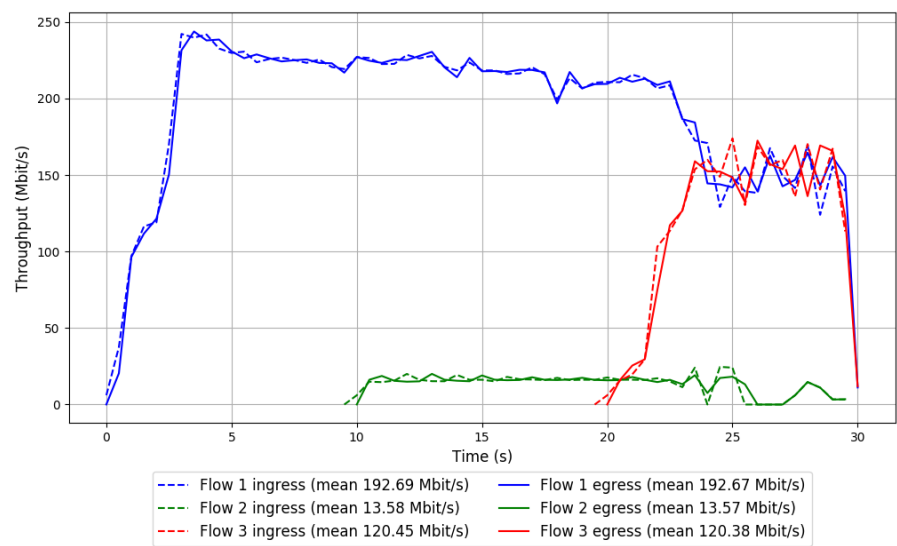


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-28 12:20:08
End at: 2018-02-28 12:20:38

# Below is generated by plot.py at 2018-02-28 18:09:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 241.64 Mbit/s
95th percentile per-packet one-way delay: 119.457 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 192.67 Mbit/s
95th percentile per-packet one-way delay: 116.318 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 13.57 Mbit/s
95th percentile per-packet one-way delay: 114.536 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 120.38 Mbit/s
95th percentile per-packet one-way delay: 129.408 ms
Loss rate: 0.04%
```


Run 1: Report of TaoVA-100x — Data Link

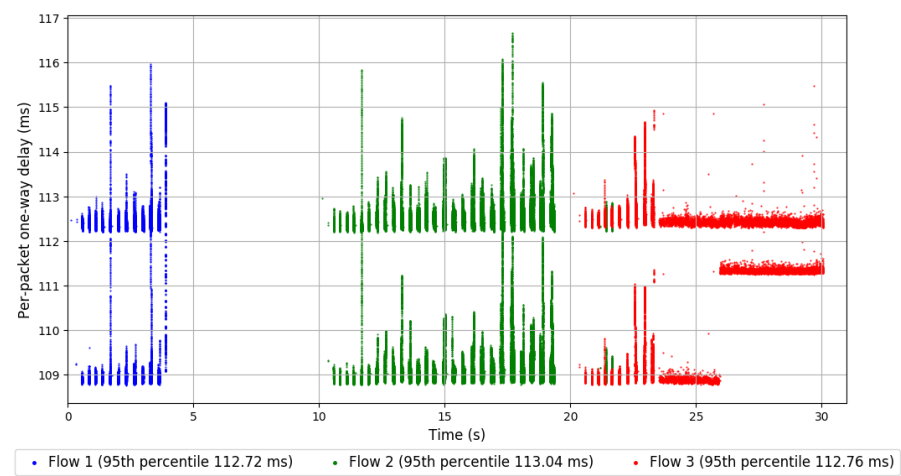
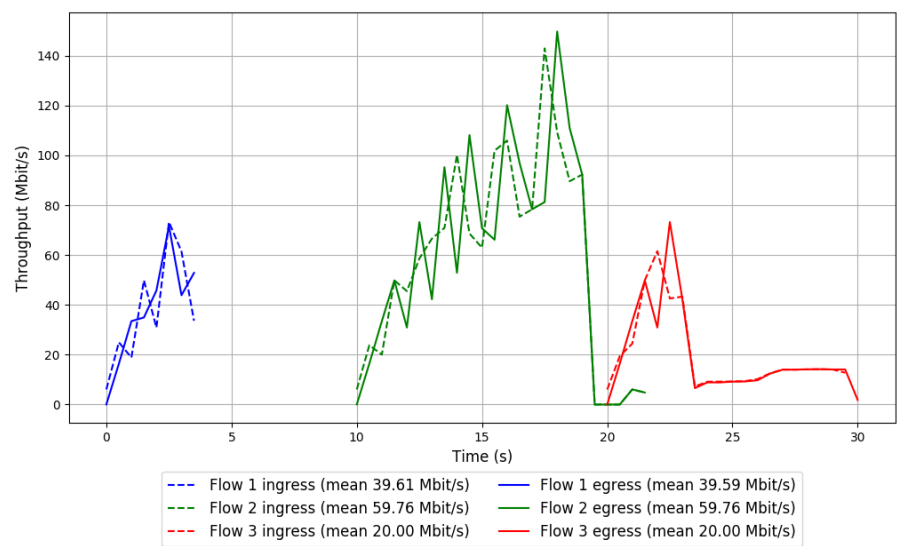


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-28 12:39:56
End at: 2018-02-28 12:40:26

# Below is generated by plot.py at 2018-02-28 18:09:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.65 Mbit/s
95th percentile per-packet one-way delay: 112.953 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 112.716 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.76 Mbit/s
95th percentile per-packet one-way delay: 113.044 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.00 Mbit/s
95th percentile per-packet one-way delay: 112.757 ms
Loss rate: 0.00%
```

Run 2: Report of TaoVA-100x — Data Link

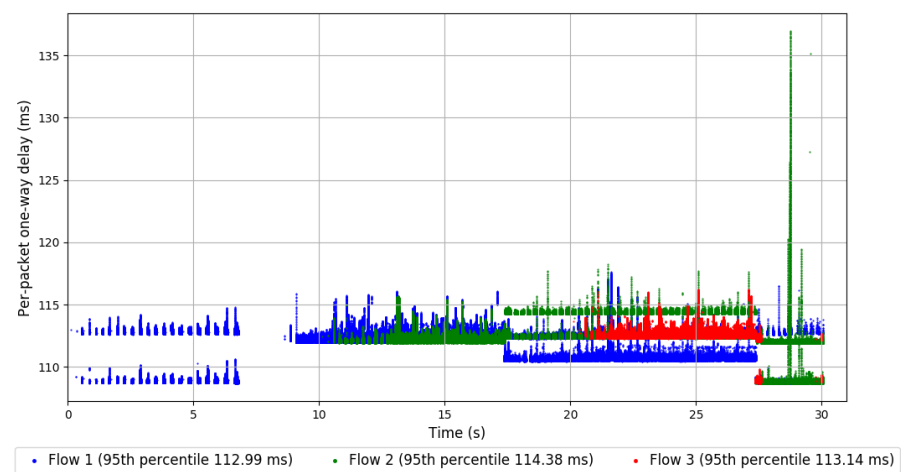
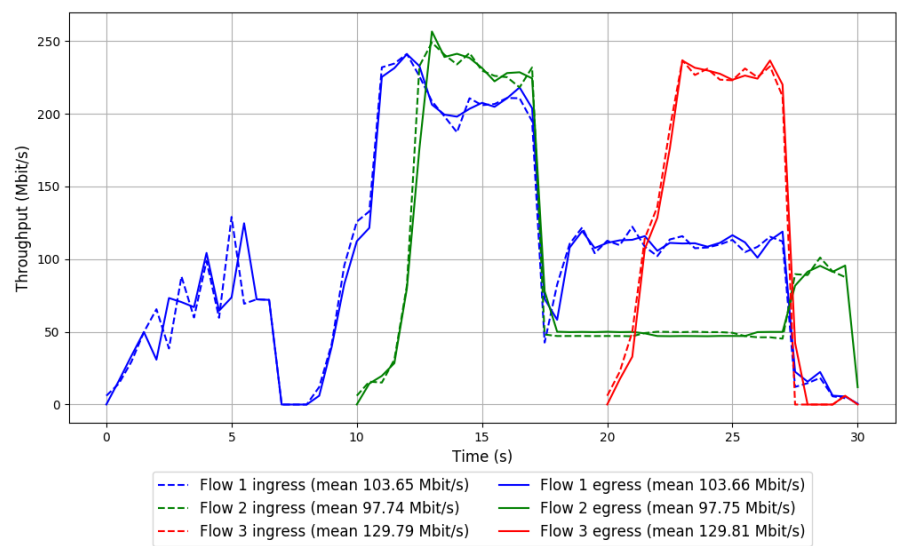


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-28 12:59:25
End at: 2018-02-28 12:59:55

# Below is generated by plot.py at 2018-02-28 18:09:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.58 Mbit/s
95th percentile per-packet one-way delay: 113.970 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.66 Mbit/s
95th percentile per-packet one-way delay: 112.991 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 97.75 Mbit/s
95th percentile per-packet one-way delay: 114.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 129.81 Mbit/s
95th percentile per-packet one-way delay: 113.142 ms
Loss rate: 0.00%
```

Run 3: Report of TaoVA-100x — Data Link



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-28 13:19:07

End at: 2018-02-28 13:19:37

Below is generated by plot.py at 2018-02-28 18:10:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.11 Mbit/s

95th percentile per-packet one-way delay: 114.396 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 166.49 Mbit/s

95th percentile per-packet one-way delay: 114.608 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 126.15 Mbit/s

95th percentile per-packet one-way delay: 113.598 ms

Loss rate: 0.00%

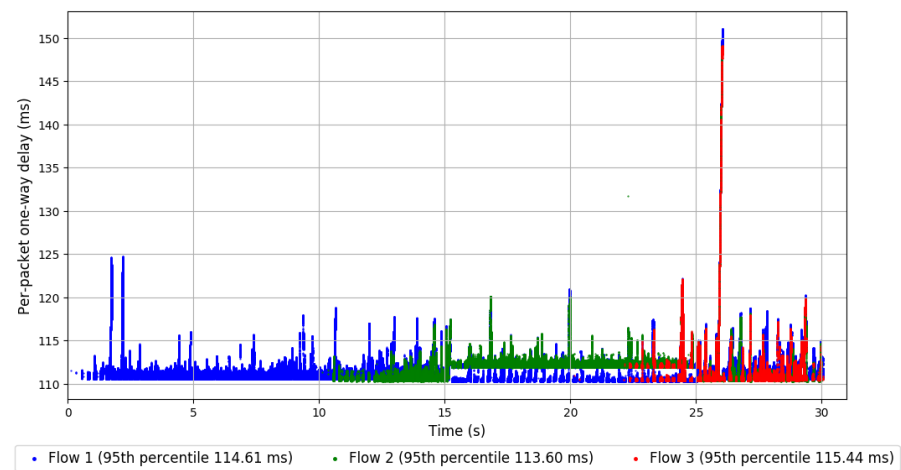
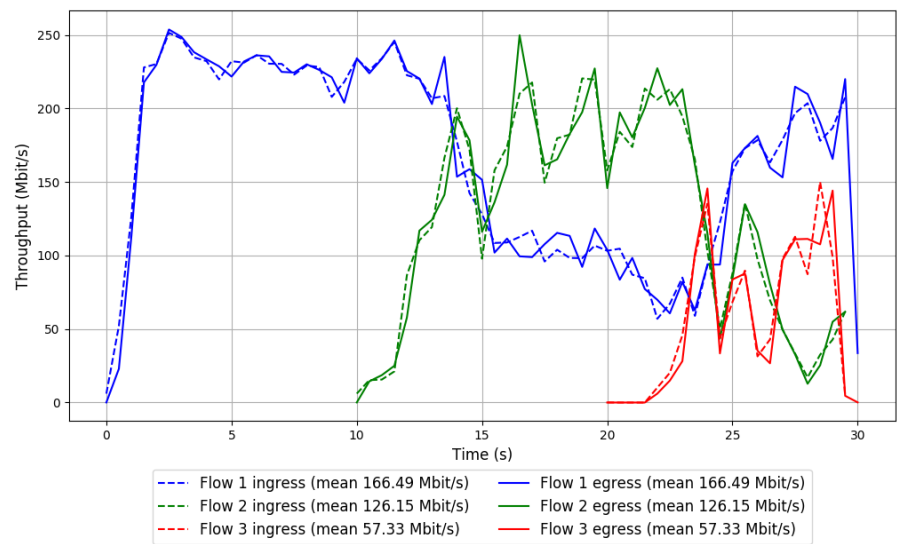
-- Flow 3:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 115.442 ms

Loss rate: 0.00%

Run 4: Report of TaoVA-100x — Data Link



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-28 13:38:58

End at: 2018-02-28 13:39:28

Below is generated by plot.py at 2018-02-28 18:10:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.07 Mbit/s

95th percentile per-packet one-way delay: 112.426 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.60 Mbit/s

95th percentile per-packet one-way delay: 112.473 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 118.14 Mbit/s

95th percentile per-packet one-way delay: 112.291 ms

Loss rate: 0.00%

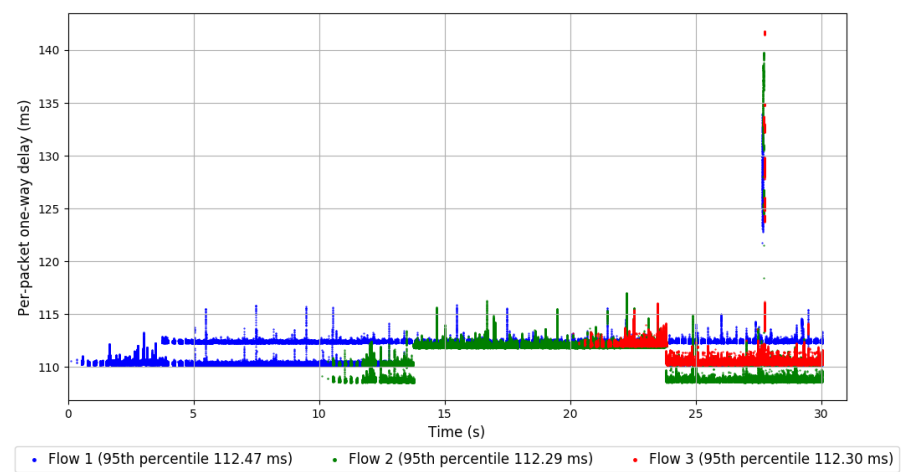
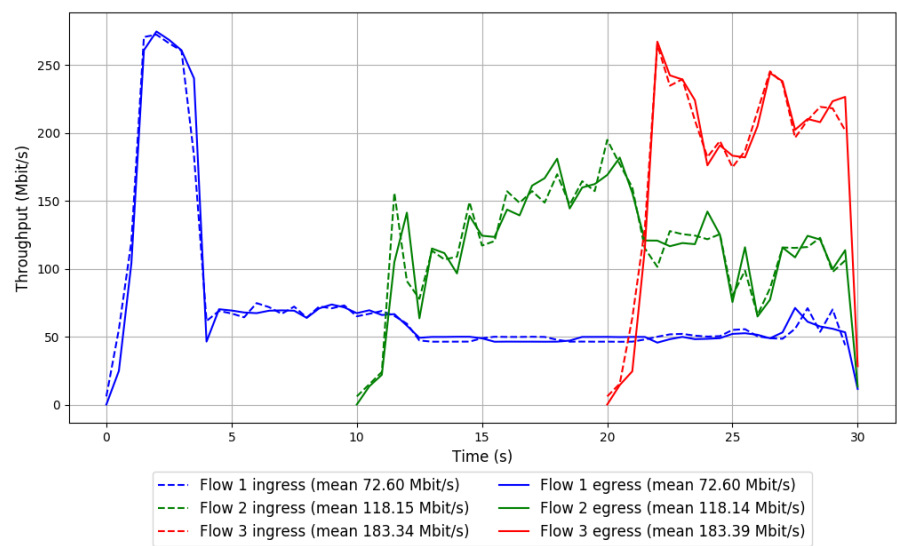
-- Flow 3:

Average throughput: 183.39 Mbit/s

95th percentile per-packet one-way delay: 112.302 ms

Loss rate: 0.00%

Run 5: Report of TaoVA-100x — Data Link



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-28 13:58:59

End at: 2018-02-28 13:59:29

Below is generated by plot.py at 2018-02-28 18:10:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.81 Mbit/s

95th percentile per-packet one-way delay: 113.279 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 182.87 Mbit/s

95th percentile per-packet one-way delay: 113.373 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.90 Mbit/s

95th percentile per-packet one-way delay: 112.375 ms

Loss rate: 0.00%

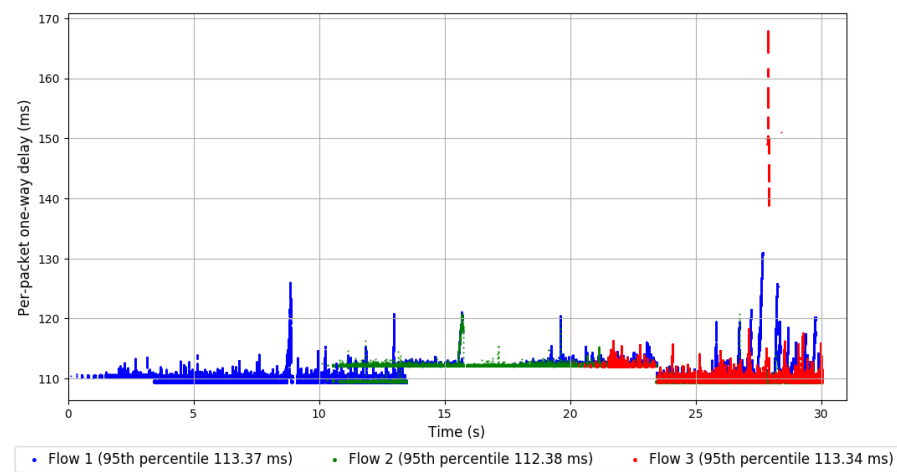
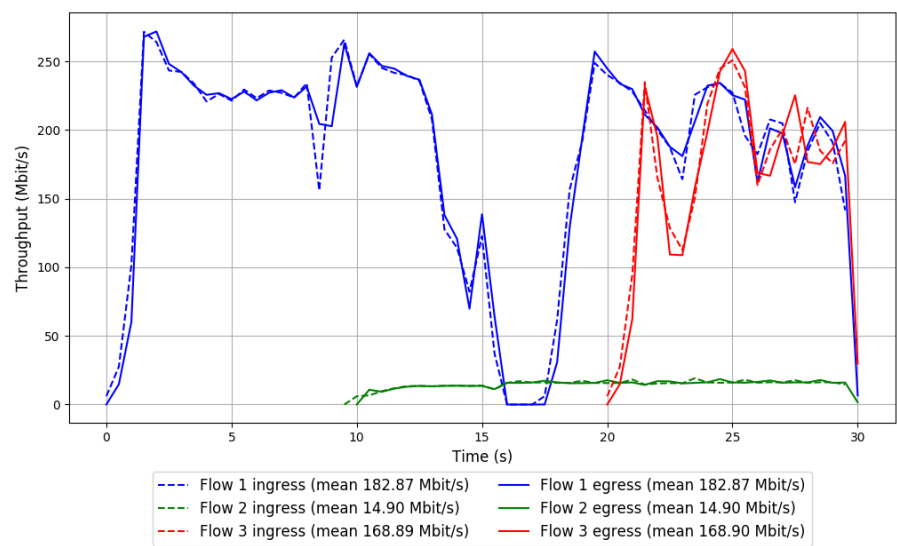
-- Flow 3:

Average throughput: 168.90 Mbit/s

95th percentile per-packet one-way delay: 113.340 ms

Loss rate: 0.03%

Run 6: Report of TaoVA-100x — Data Link

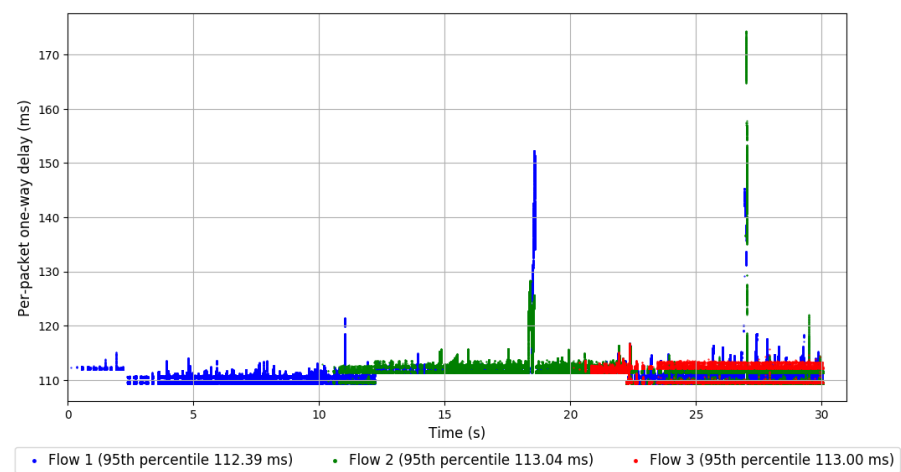
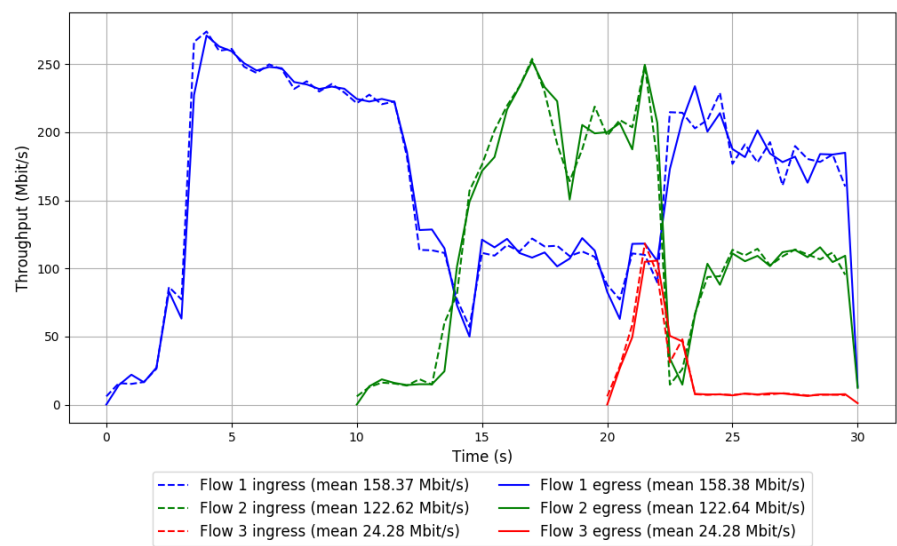


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-28 14:18:50
End at: 2018-02-28 14:19:20

# Below is generated by plot.py at 2018-02-28 18:10:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.89 Mbit/s
95th percentile per-packet one-way delay: 112.742 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 158.38 Mbit/s
95th percentile per-packet one-way delay: 112.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.64 Mbit/s
95th percentile per-packet one-way delay: 113.041 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.28 Mbit/s
95th percentile per-packet one-way delay: 113.002 ms
Loss rate: 0.00%
```

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-28 14:38:38

End at: 2018-02-28 14:39:08

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.01 Mbit/s

95th percentile per-packet one-way delay: 115.632 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.66 Mbit/s

95th percentile per-packet one-way delay: 113.149 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 133.99 Mbit/s

95th percentile per-packet one-way delay: 116.713 ms

Loss rate: 0.00%

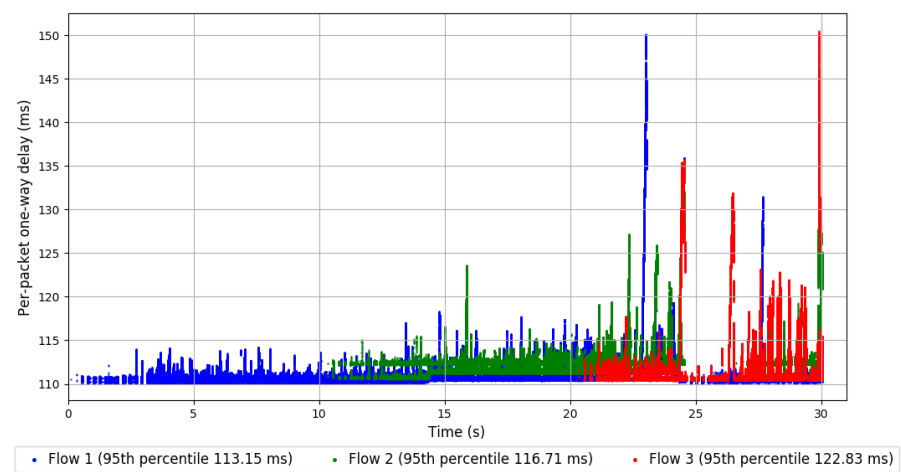
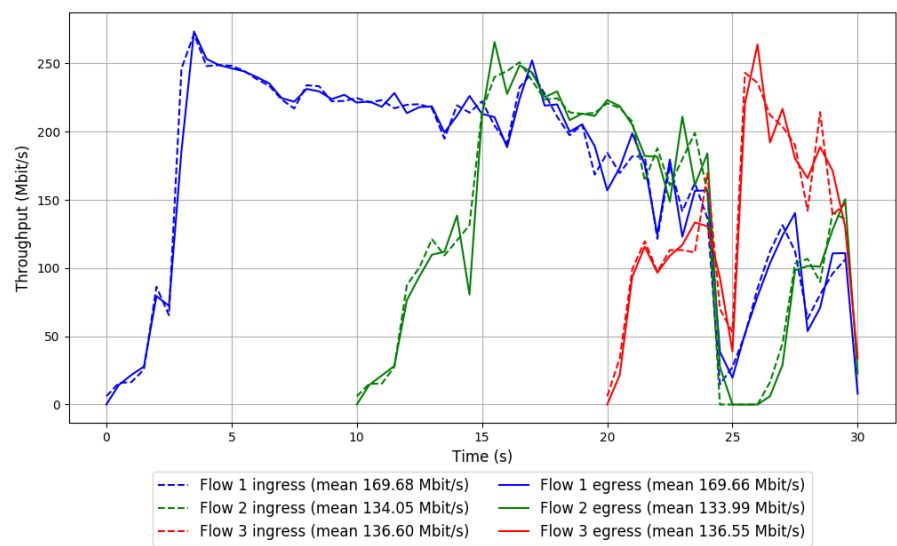
-- Flow 3:

Average throughput: 136.55 Mbit/s

95th percentile per-packet one-way delay: 122.831 ms

Loss rate: 0.02%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-28 14:58:32

End at: 2018-02-28 14:59:02

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.10 Mbit/s

95th percentile per-packet one-way delay: 112.542 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 14.62 Mbit/s

95th percentile per-packet one-way delay: 112.545 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 112.540 ms

Loss rate: 0.01%

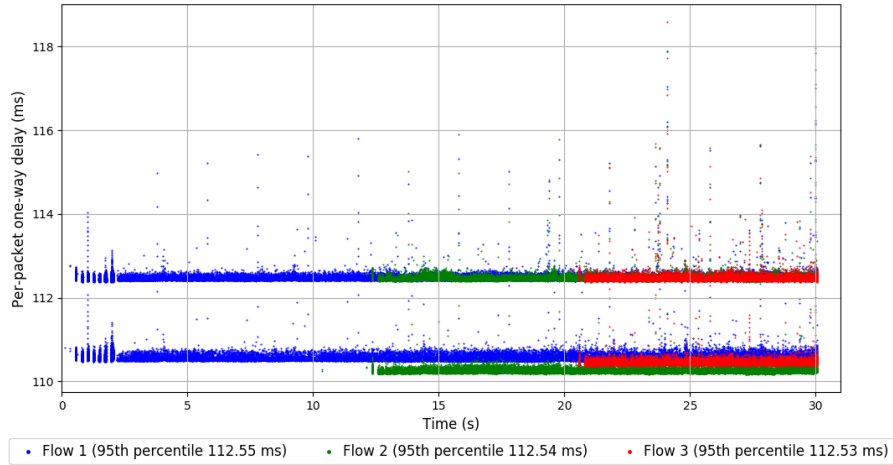
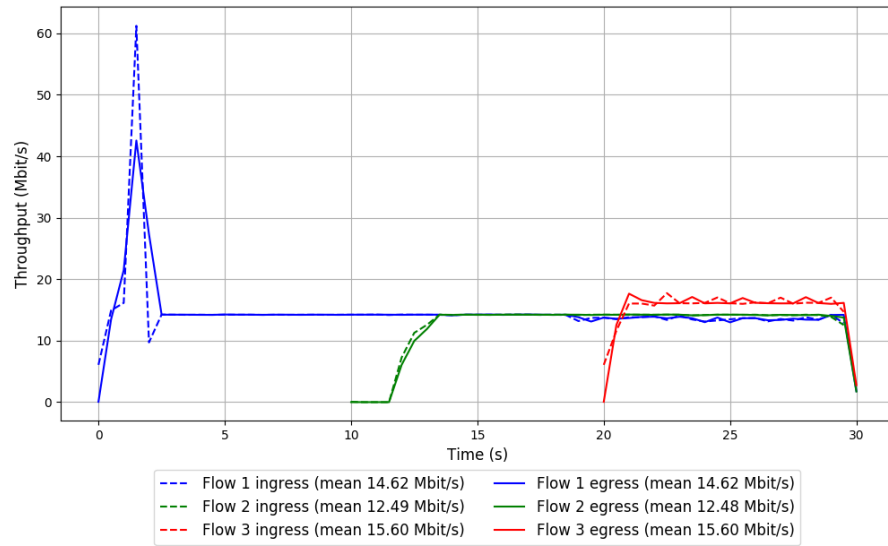
-- Flow 3:

Average throughput: 15.60 Mbit/s

95th percentile per-packet one-way delay: 112.535 ms

Loss rate: 0.00%

Run 9: Report of TaoVA-100x — Data Link

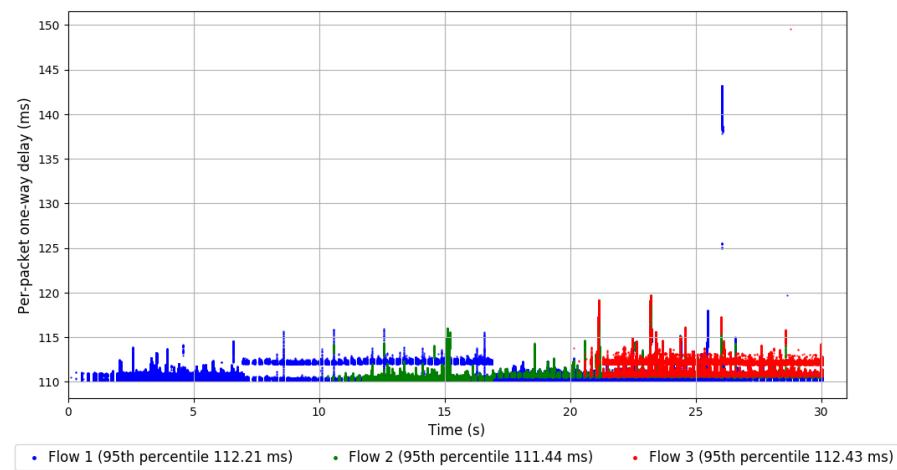
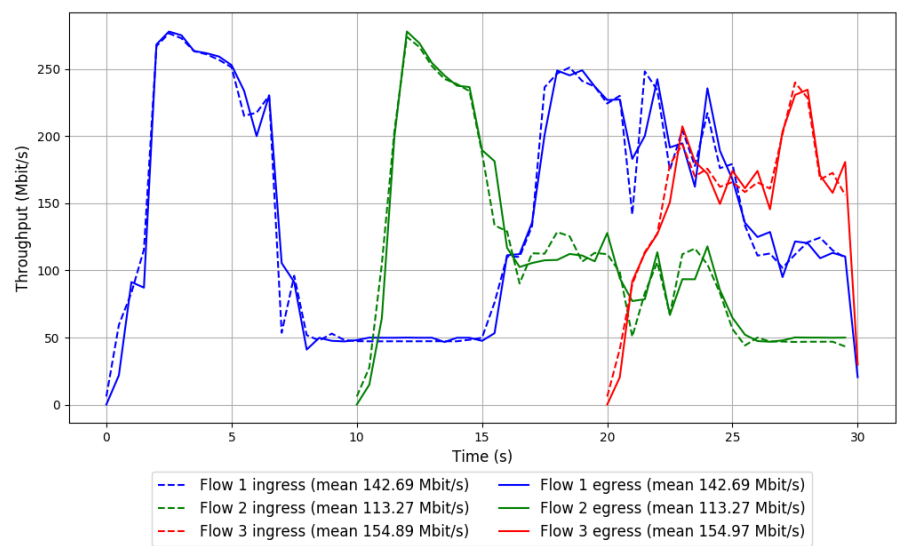


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-28 15:18:55
End at: 2018-02-28 15:19:25

# Below is generated by plot.py at 2018-02-28 18:15:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.10 Mbit/s
95th percentile per-packet one-way delay: 112.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 142.69 Mbit/s
95th percentile per-packet one-way delay: 112.207 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 113.27 Mbit/s
95th percentile per-packet one-way delay: 111.443 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 154.97 Mbit/s
95th percentile per-packet one-way delay: 112.434 ms
Loss rate: 0.00%
```

Run 10: Report of TaoVA-100x — Data Link



Run 1: Statistics of TCP Vegas

Start at: 2018-02-28 12:31:01

End at: 2018-02-28 12:31:31

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.03 Mbit/s

95th percentile per-packet one-way delay: 119.744 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 101.80 Mbit/s

95th percentile per-packet one-way delay: 119.860 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.16 Mbit/s

95th percentile per-packet one-way delay: 119.742 ms

Loss rate: 0.00%

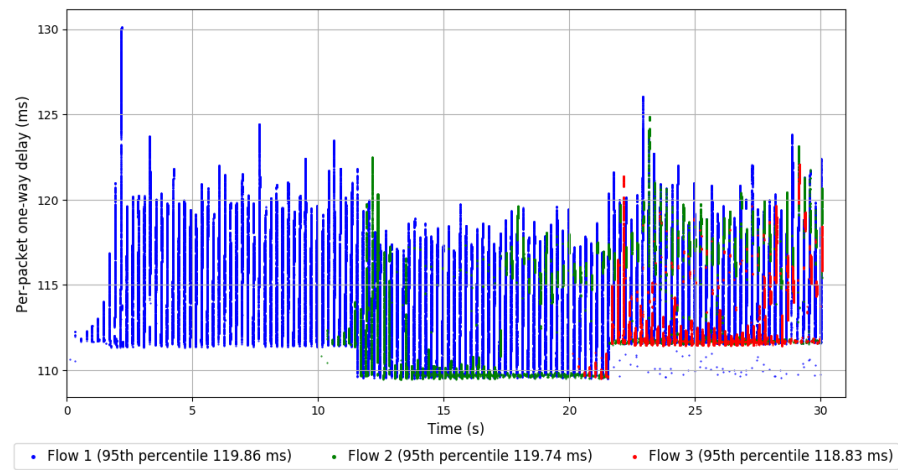
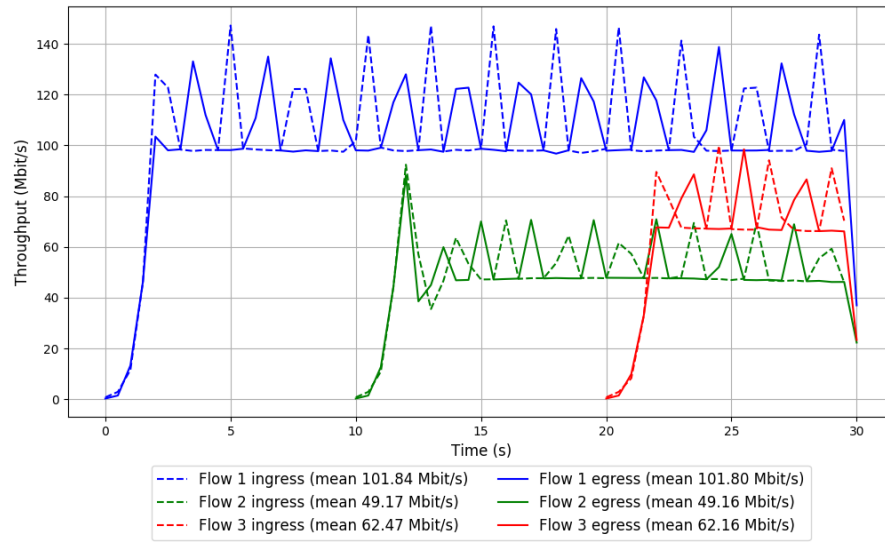
-- Flow 3:

Average throughput: 62.16 Mbit/s

95th percentile per-packet one-way delay: 118.827 ms

Loss rate: 0.48%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-28 12:50:28

End at: 2018-02-28 12:50:58

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.76 Mbit/s

95th percentile per-packet one-way delay: 118.084 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 41.68 Mbit/s

95th percentile per-packet one-way delay: 112.468 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.89 Mbit/s

95th percentile per-packet one-way delay: 114.138 ms

Loss rate: 0.17%

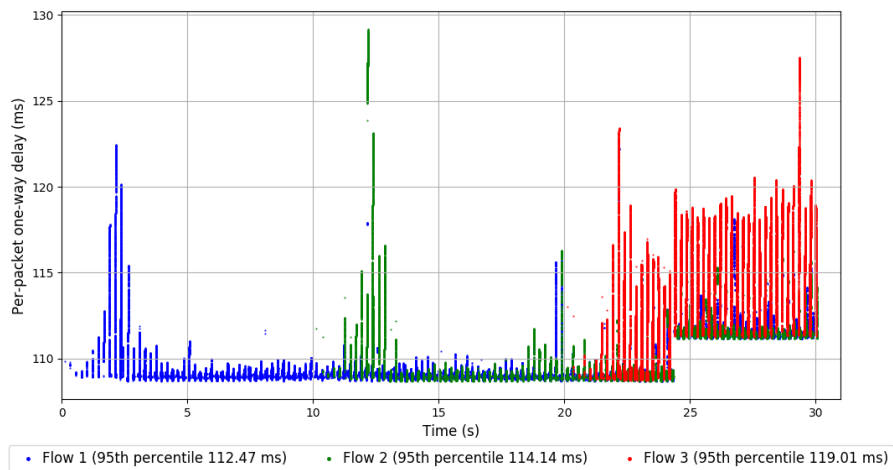
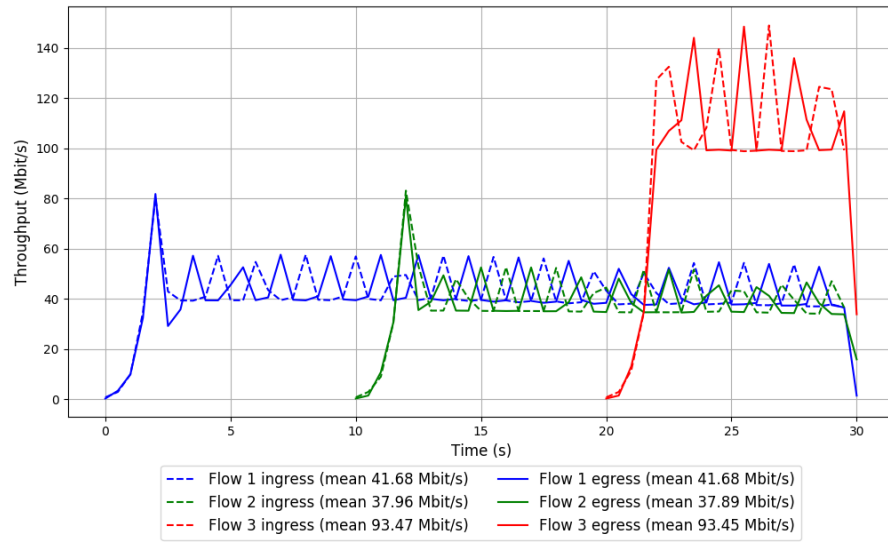
-- Flow 3:

Average throughput: 93.45 Mbit/s

95th percentile per-packet one-way delay: 119.012 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-28 13:10:29

End at: 2018-02-28 13:10:59

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.42 Mbit/s

95th percentile per-packet one-way delay: 113.257 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 34.82 Mbit/s

95th percentile per-packet one-way delay: 113.325 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.95 Mbit/s

95th percentile per-packet one-way delay: 113.190 ms

Loss rate: 0.00%

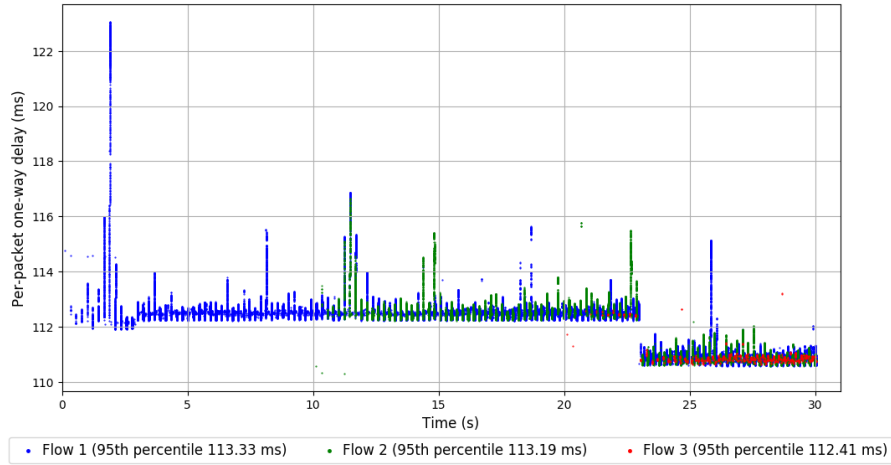
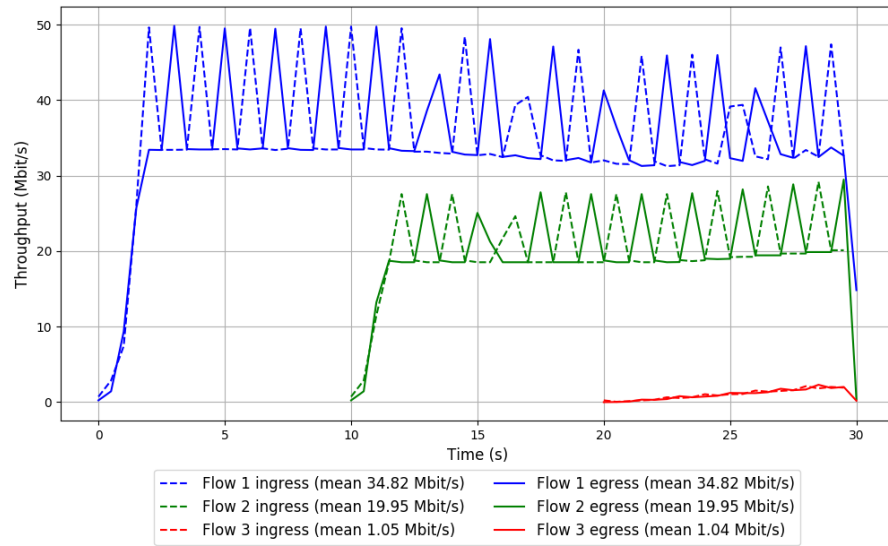
-- Flow 3:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 112.412 ms

Loss rate: 1.15%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-28 13:30:06

End at: 2018-02-28 13:30:36

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.62 Mbit/s

95th percentile per-packet one-way delay: 118.968 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.42 Mbit/s

95th percentile per-packet one-way delay: 119.108 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.34 Mbit/s

95th percentile per-packet one-way delay: 117.902 ms

Loss rate: 0.00%

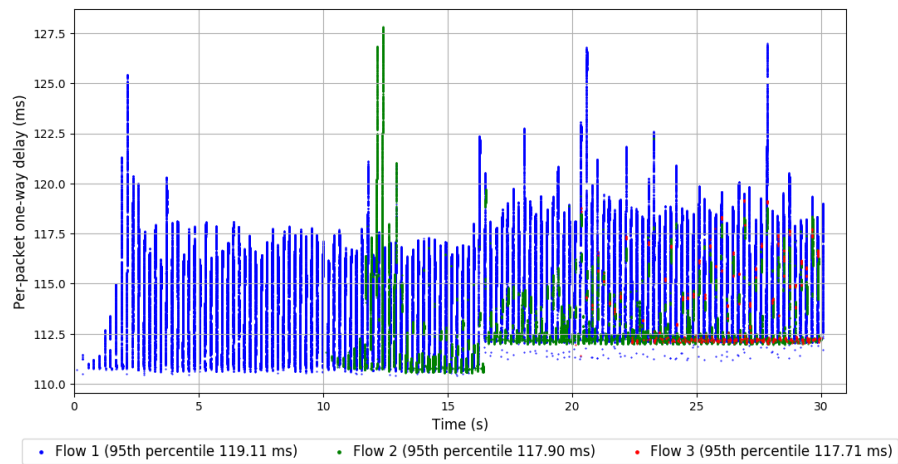
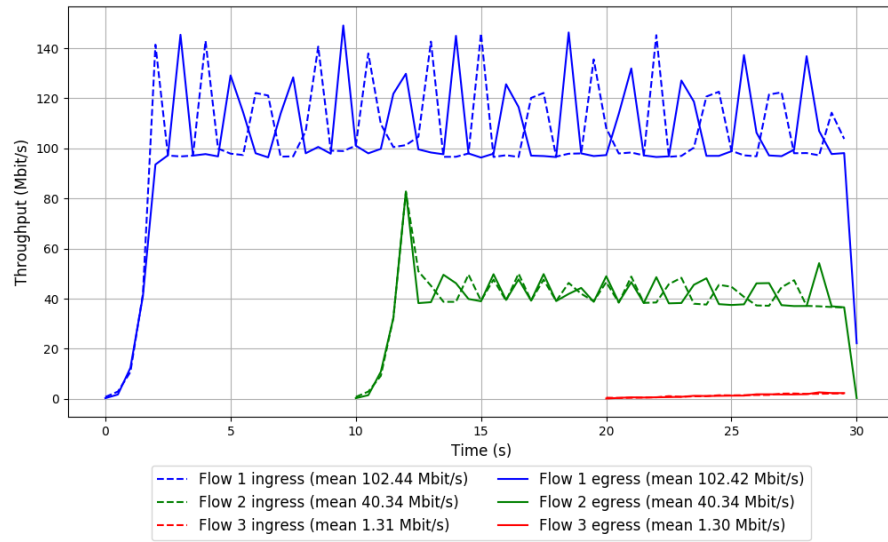
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 117.709 ms

Loss rate: 0.56%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-28 13:50:04

End at: 2018-02-28 13:50:34

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.17 Mbit/s

95th percentile per-packet one-way delay: 120.276 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.42 Mbit/s

95th percentile per-packet one-way delay: 118.993 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.70 Mbit/s

95th percentile per-packet one-way delay: 120.527 ms

Loss rate: 0.00%

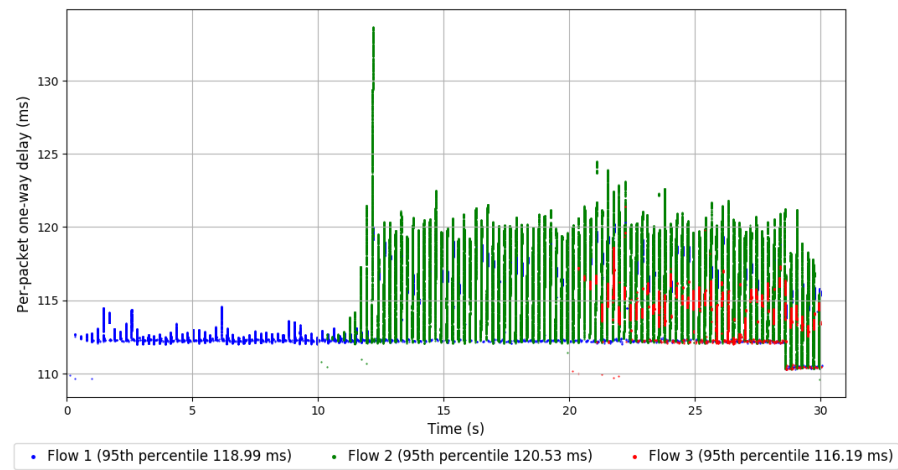
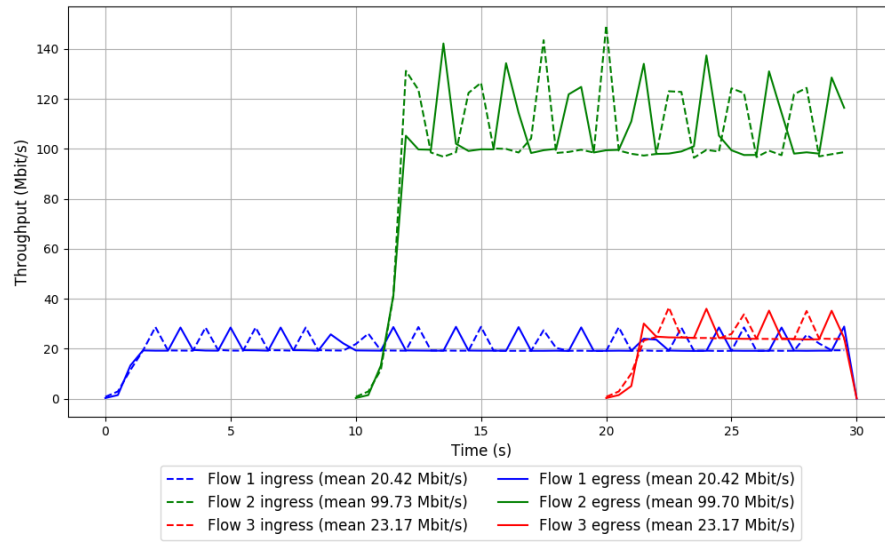
-- Flow 3:

Average throughput: 23.17 Mbit/s

95th percentile per-packet one-way delay: 116.192 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-28 14:09:54

End at: 2018-02-28 14:10:24

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.04 Mbit/s

95th percentile per-packet one-way delay: 118.911 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 21.04 Mbit/s

95th percentile per-packet one-way delay: 118.814 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.29 Mbit/s

95th percentile per-packet one-way delay: 119.013 ms

Loss rate: 0.00%

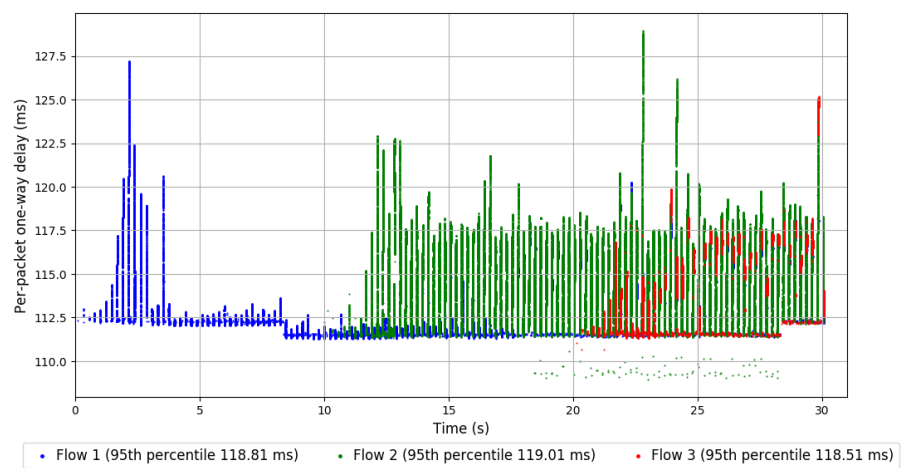
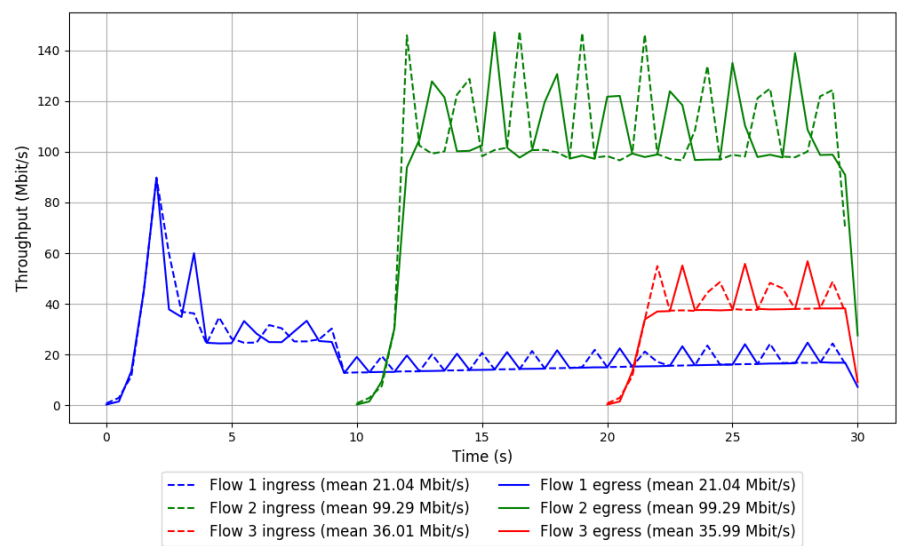
-- Flow 3:

Average throughput: 35.99 Mbit/s

95th percentile per-packet one-way delay: 118.513 ms

Loss rate: 0.02%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-28 14:29:46

End at: 2018-02-28 14:30:16

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.23 Mbit/s

95th percentile per-packet one-way delay: 118.727 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 93.66 Mbit/s

95th percentile per-packet one-way delay: 118.100 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.00 Mbit/s

95th percentile per-packet one-way delay: 119.643 ms

Loss rate: 0.00%

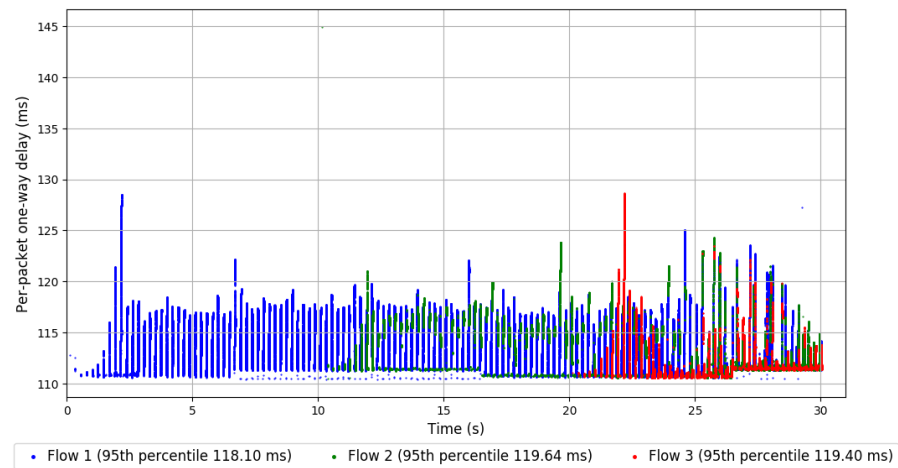
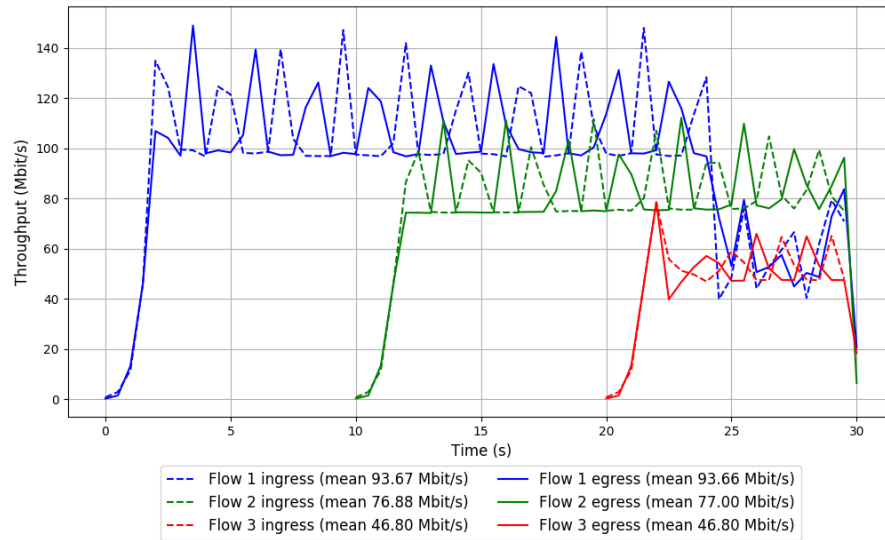
-- Flow 3:

Average throughput: 46.80 Mbit/s

95th percentile per-packet one-way delay: 119.398 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-28 14:49:42

End at: 2018-02-28 14:50:12

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.09 Mbit/s

95th percentile per-packet one-way delay: 116.990 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.01 Mbit/s

95th percentile per-packet one-way delay: 114.260 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.60 Mbit/s

95th percentile per-packet one-way delay: 114.677 ms

Loss rate: 0.00%

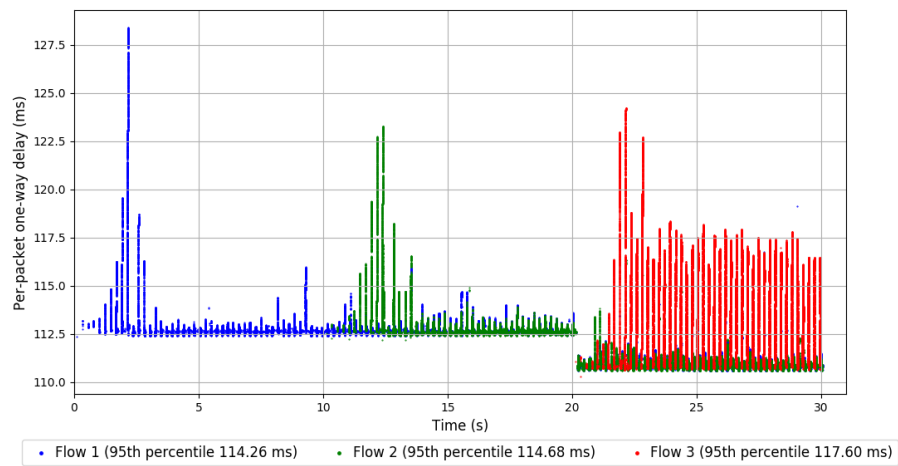
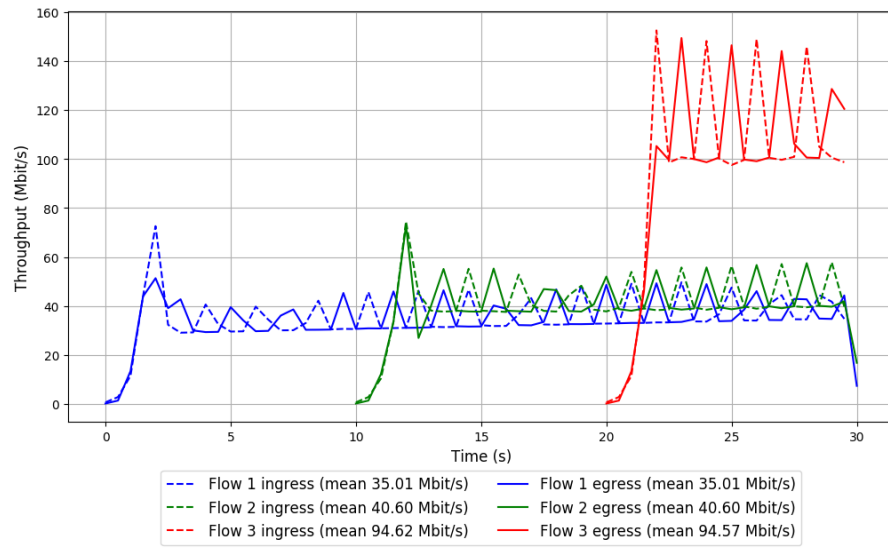
-- Flow 3:

Average throughput: 94.57 Mbit/s

95th percentile per-packet one-way delay: 117.600 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-28 15:09:48

End at: 2018-02-28 15:10:18

Below is generated by plot.py at 2018-02-28 18:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 201.45 Mbit/s

95th percentile per-packet one-way delay: 121.754 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.21 Mbit/s

95th percentile per-packet one-way delay: 122.170 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.43 Mbit/s

95th percentile per-packet one-way delay: 120.967 ms

Loss rate: 0.00%

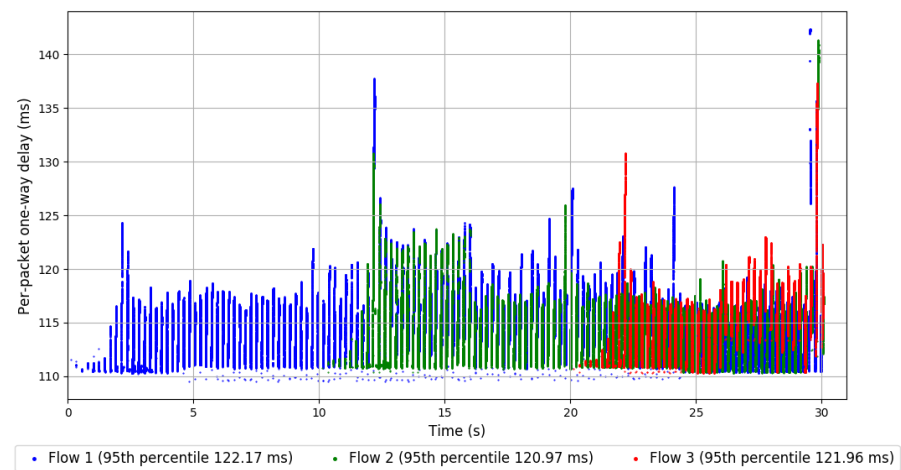
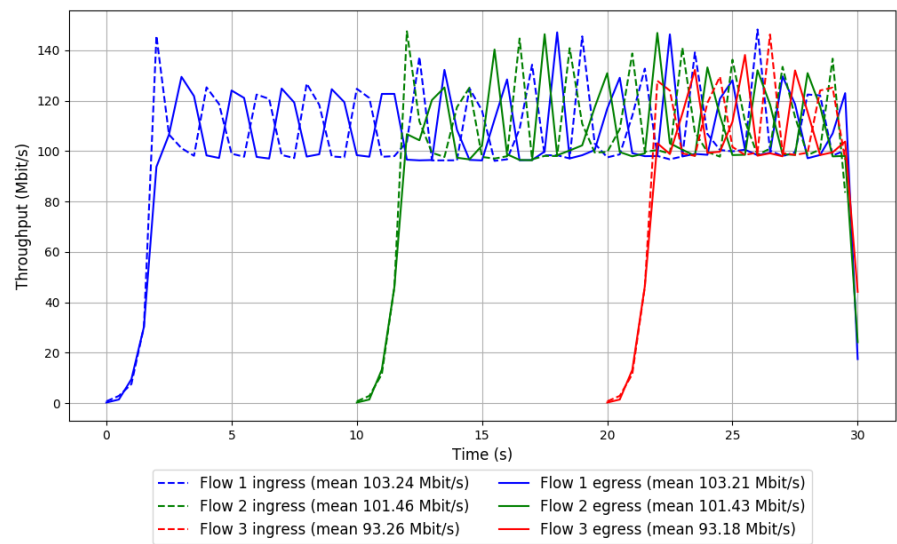
-- Flow 3:

Average throughput: 93.18 Mbit/s

95th percentile per-packet one-way delay: 121.961 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-28 15:29:58

End at: 2018-02-28 15:30:28

Below is generated by plot.py at 2018-02-28 18:15:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.08 Mbit/s

95th percentile per-packet one-way delay: 117.174 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.24 Mbit/s

95th percentile per-packet one-way delay: 114.724 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.46 Mbit/s

95th percentile per-packet one-way delay: 113.306 ms

Loss rate: 0.00%

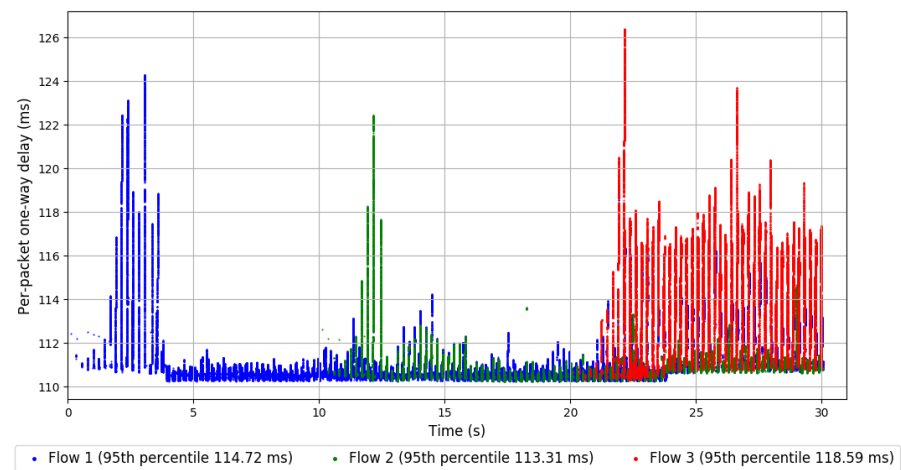
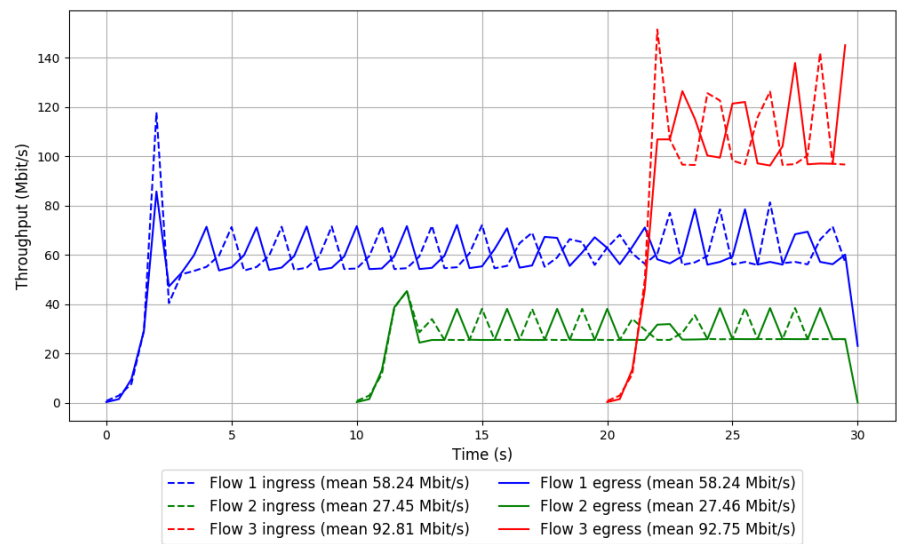
-- Flow 3:

Average throughput: 92.75 Mbit/s

95th percentile per-packet one-way delay: 118.588 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

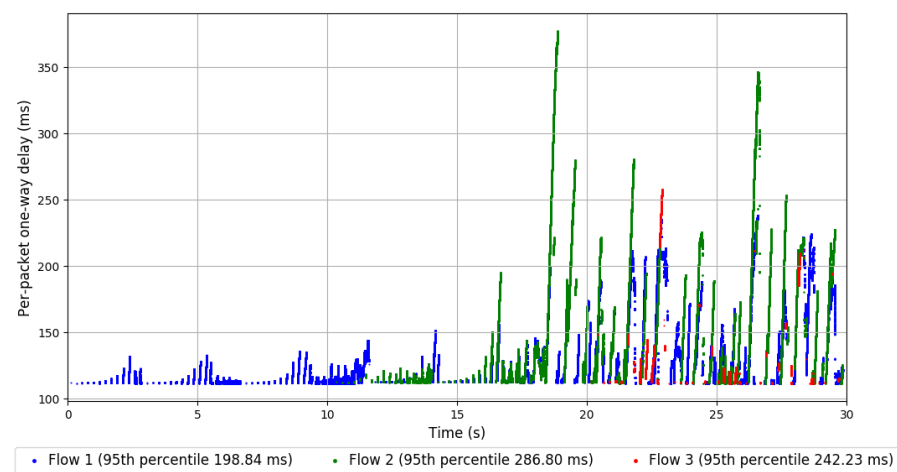
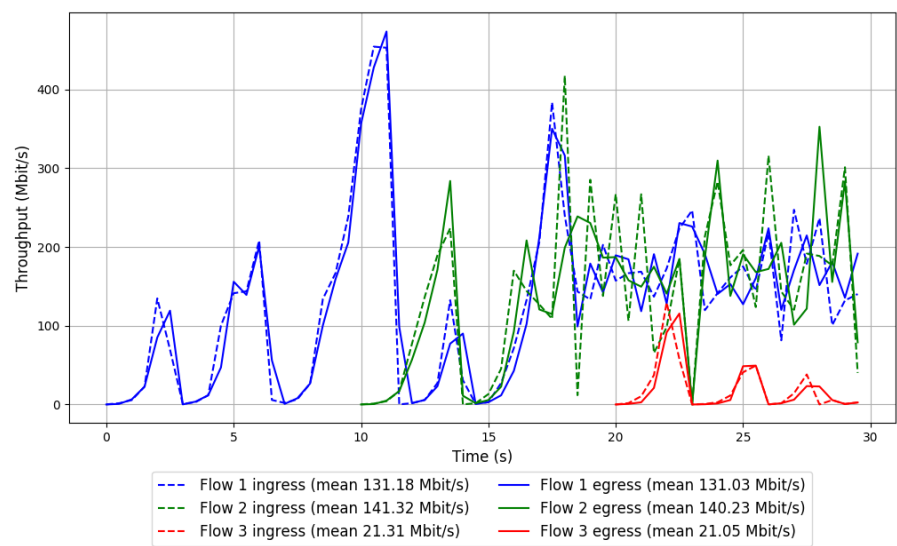


```
Run 1: Statistics of Verus

Start at: 2018-02-28 12:23:31
End at: 2018-02-28 12:24:01

# Below is generated by plot.py at 2018-02-28 18:15:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.77 Mbit/s
95th percentile per-packet one-way delay: 225.174 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 131.03 Mbit/s
95th percentile per-packet one-way delay: 198.843 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 140.23 Mbit/s
95th percentile per-packet one-way delay: 286.797 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 21.05 Mbit/s
95th percentile per-packet one-way delay: 242.233 ms
Loss rate: 1.18%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-28 12:42:58

End at: 2018-02-28 12:43:28

Below is generated by plot.py at 2018-02-28 18:16:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.08 Mbit/s

95th percentile per-packet one-way delay: 237.346 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 197.07 Mbit/s

95th percentile per-packet one-way delay: 249.858 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 70.11 Mbit/s

95th percentile per-packet one-way delay: 208.147 ms

Loss rate: 0.43%

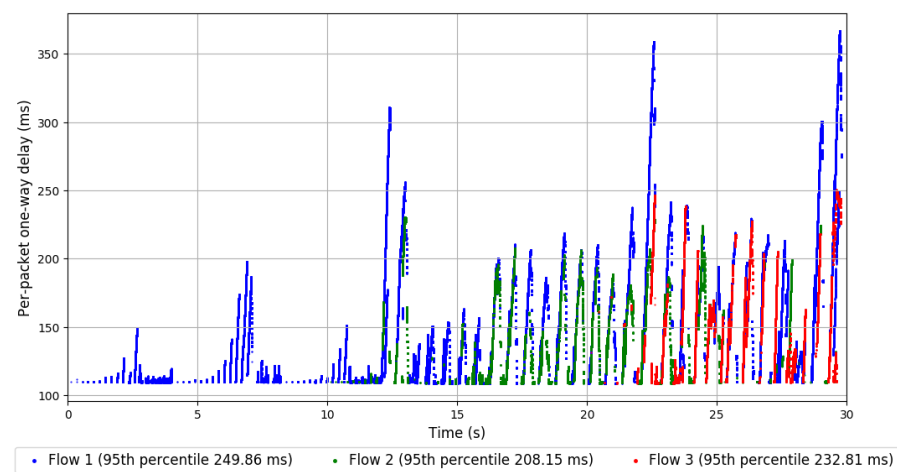
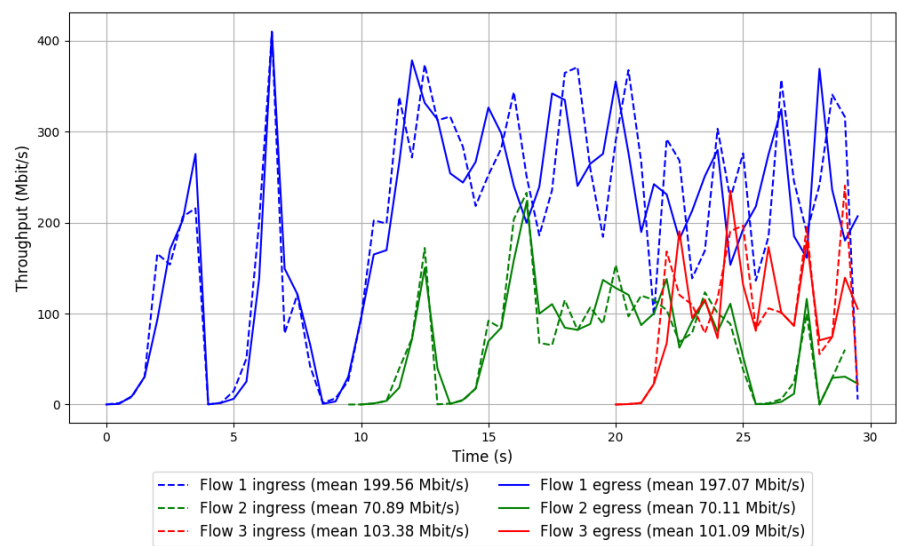
-- Flow 3:

Average throughput: 101.09 Mbit/s

95th percentile per-packet one-way delay: 232.812 ms

Loss rate: 1.23%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-28 13:02:44

End at: 2018-02-28 13:03:14

Below is generated by plot.py at 2018-02-28 18:17:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.54 Mbit/s

95th percentile per-packet one-way delay: 160.654 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 202.65 Mbit/s

95th percentile per-packet one-way delay: 150.225 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 110.10 Mbit/s

95th percentile per-packet one-way delay: 168.564 ms

Loss rate: 0.66%

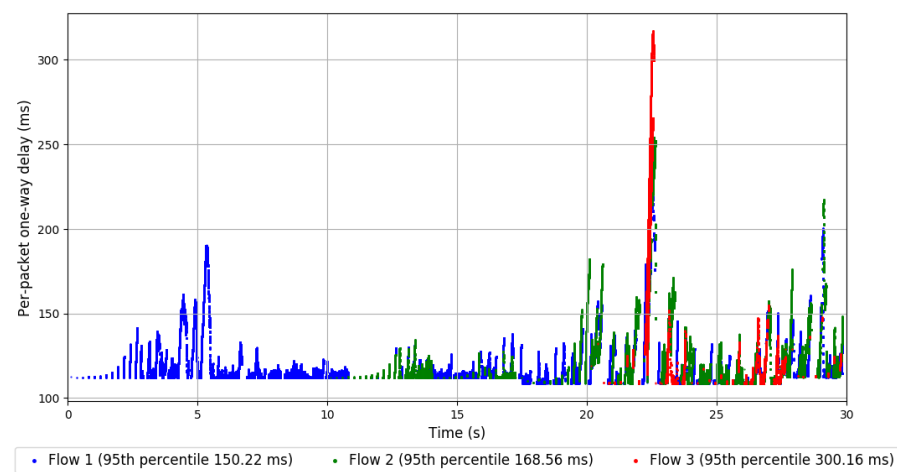
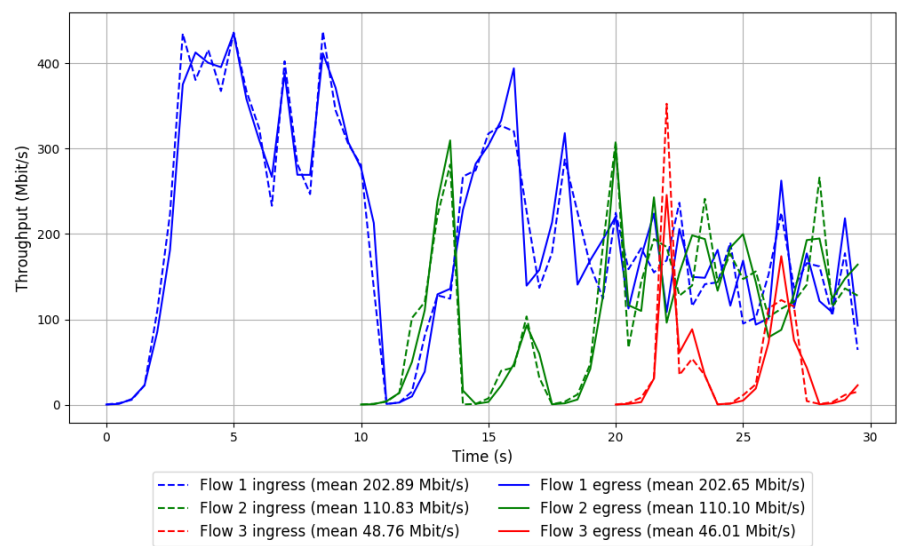
-- Flow 3:

Average throughput: 46.01 Mbit/s

95th percentile per-packet one-way delay: 300.156 ms

Loss rate: 5.57%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-28 13:22:36

End at: 2018-02-28 13:23:06

Below is generated by plot.py at 2018-02-28 18:17:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.33 Mbit/s

95th percentile per-packet one-way delay: 148.397 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 184.29 Mbit/s

95th percentile per-packet one-way delay: 142.487 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 100.46 Mbit/s

95th percentile per-packet one-way delay: 156.451 ms

Loss rate: 0.00%

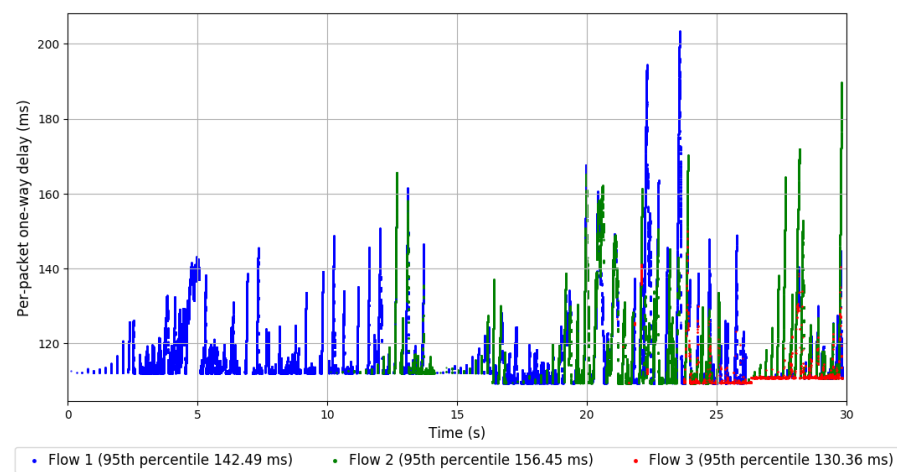
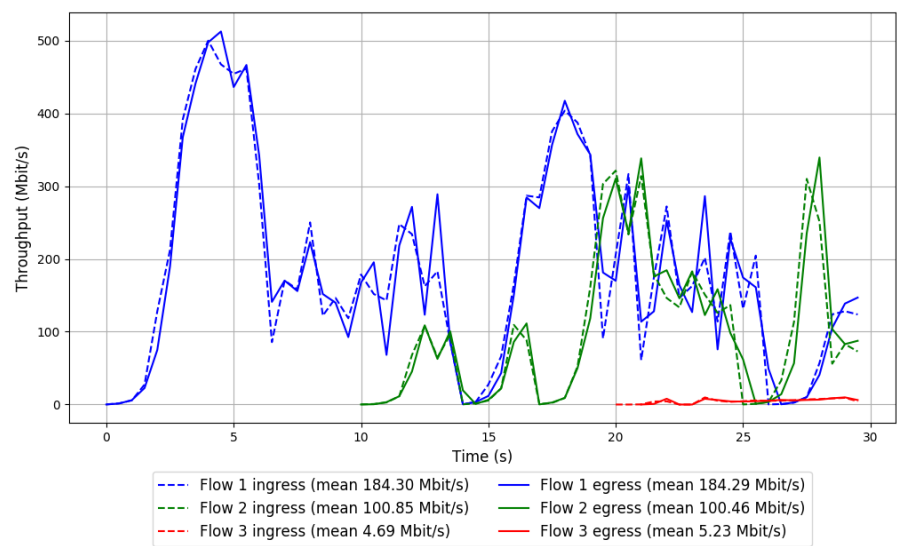
-- Flow 3:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 130.360 ms

Loss rate: 0.03%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-28 13:42:25

End at: 2018-02-28 13:42:55

Below is generated by plot.py at 2018-02-28 18:18:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 296.92 Mbit/s

95th percentile per-packet one-way delay: 201.613 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 214.68 Mbit/s

95th percentile per-packet one-way delay: 203.089 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 76.26 Mbit/s

95th percentile per-packet one-way delay: 196.503 ms

Loss rate: 0.12%

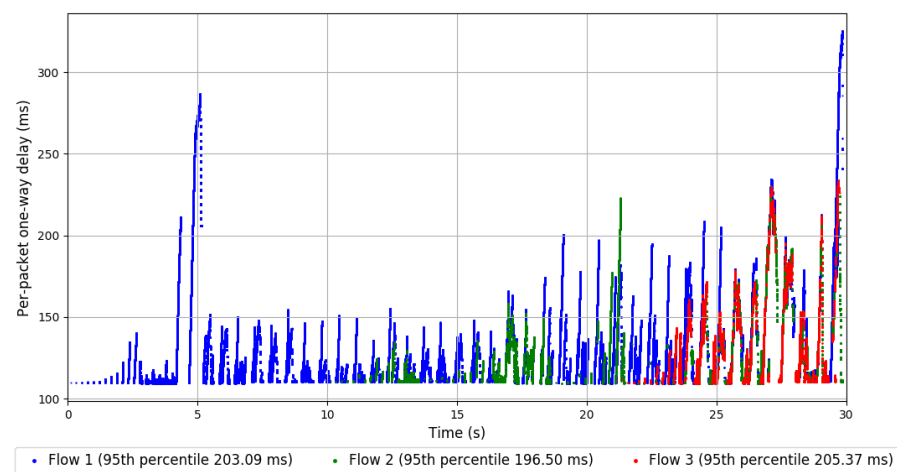
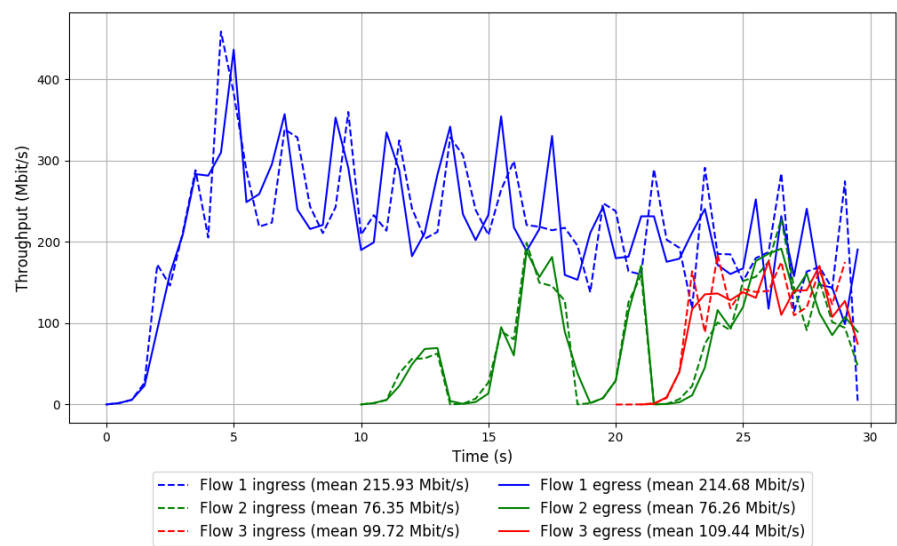
-- Flow 3:

Average throughput: 109.44 Mbit/s

95th percentile per-packet one-way delay: 205.369 ms

Loss rate: 0.48%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-28 14:02:22

End at: 2018-02-28 14:02:52

Below is generated by plot.py at 2018-02-28 18:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.69 Mbit/s

95th percentile per-packet one-way delay: 169.146 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 161.74 Mbit/s

95th percentile per-packet one-way delay: 176.786 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 144.34 Mbit/s

95th percentile per-packet one-way delay: 159.091 ms

Loss rate: 0.07%

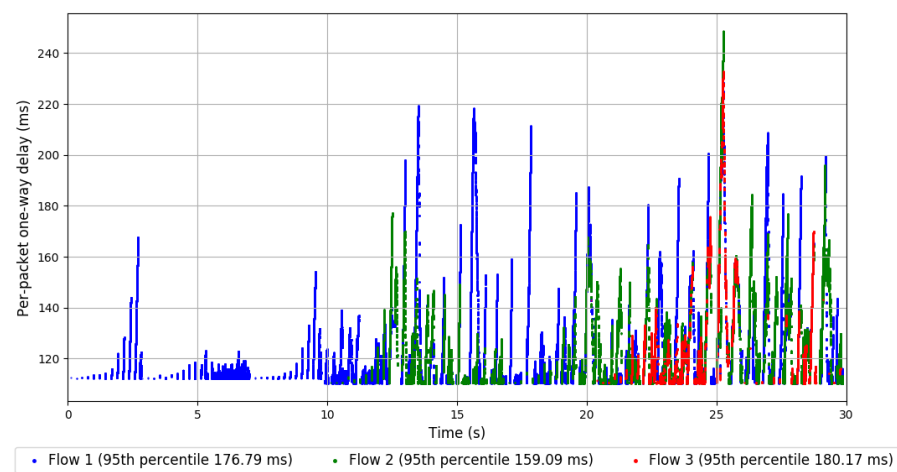
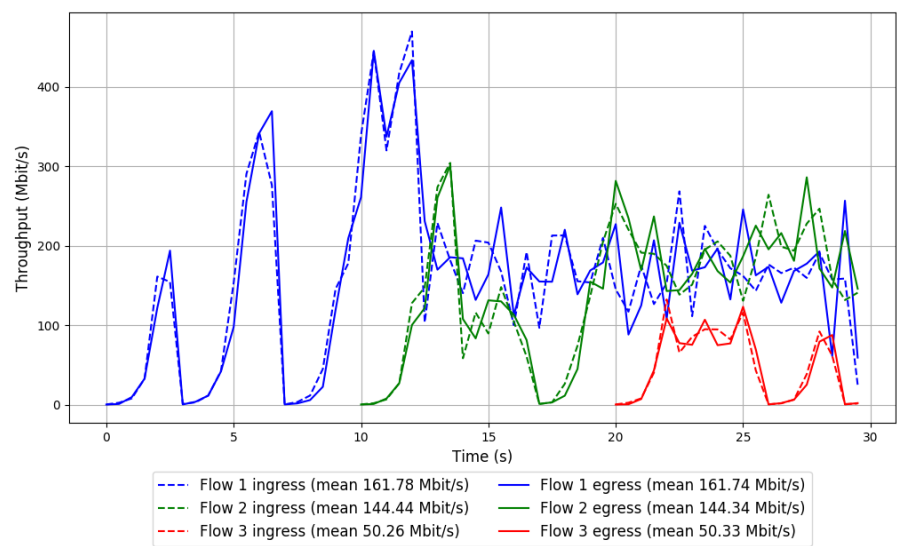
-- Flow 3:

Average throughput: 50.33 Mbit/s

95th percentile per-packet one-way delay: 180.174 ms

Loss rate: 0.13%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-28 14:22:17

End at: 2018-02-28 14:22:47

Below is generated by plot.py at 2018-02-28 18:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.08 Mbit/s

95th percentile per-packet one-way delay: 199.735 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 122.30 Mbit/s

95th percentile per-packet one-way delay: 198.855 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.83 Mbit/s

95th percentile per-packet one-way delay: 186.329 ms

Loss rate: 0.01%

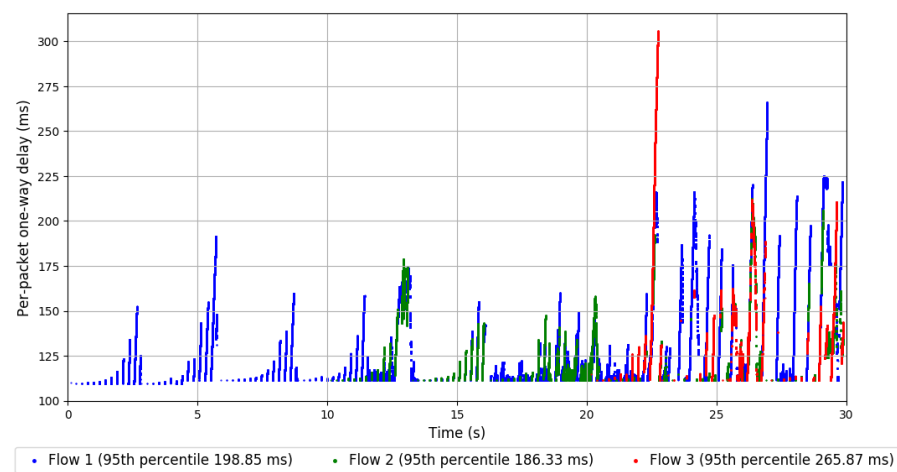
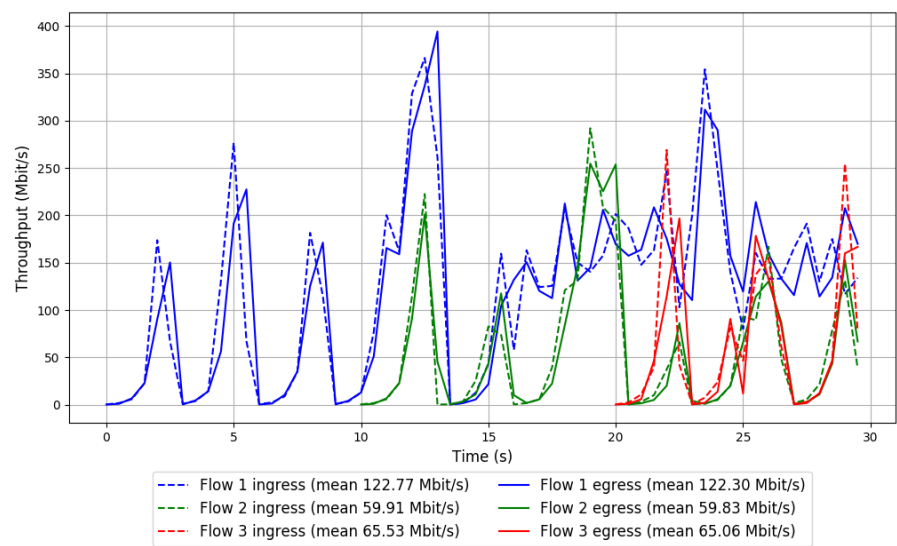
-- Flow 3:

Average throughput: 65.06 Mbit/s

95th percentile per-packet one-way delay: 265.866 ms

Loss rate: 0.45%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-28 14:42:12

End at: 2018-02-28 14:42:42

Below is generated by plot.py at 2018-02-28 18:19:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 197.08 Mbit/s

95th percentile per-packet one-way delay: 260.896 ms

Loss rate: 2.68%

-- Flow 1:

Average throughput: 114.27 Mbit/s

95th percentile per-packet one-way delay: 230.974 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 81.47 Mbit/s

95th percentile per-packet one-way delay: 159.087 ms

Loss rate: 1.06%

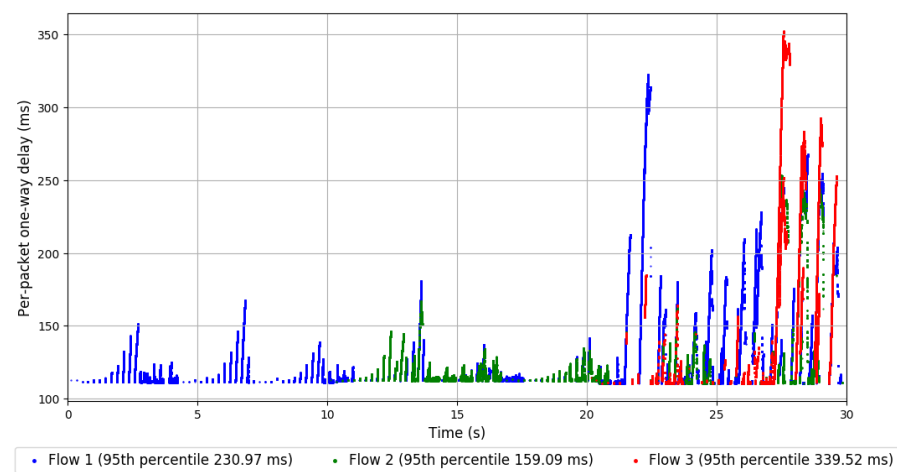
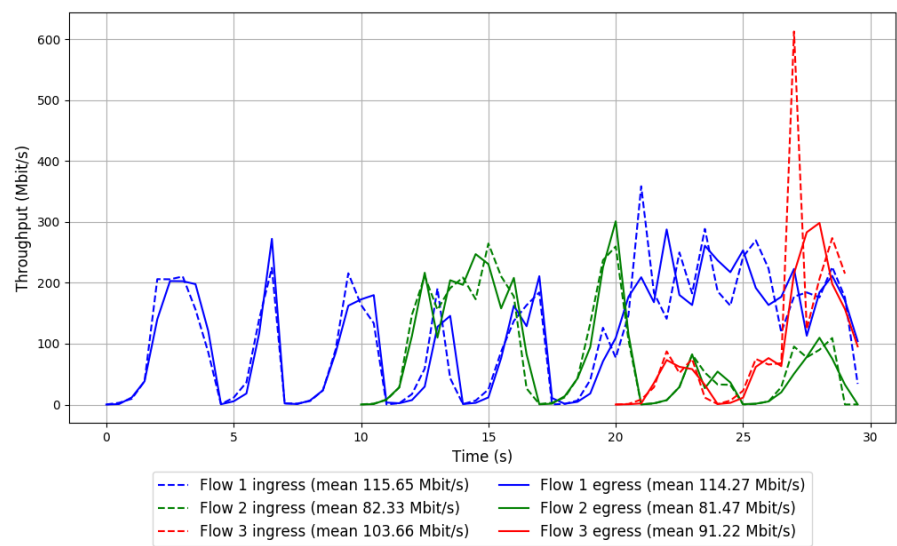
-- Flow 3:

Average throughput: 91.22 Mbit/s

95th percentile per-packet one-way delay: 339.525 ms

Loss rate: 10.70%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-28 15:01:37

End at: 2018-02-28 15:02:07

Below is generated by plot.py at 2018-02-28 18:20:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.85 Mbit/s

95th percentile per-packet one-way delay: 221.361 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 198.03 Mbit/s

95th percentile per-packet one-way delay: 236.614 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 105.49 Mbit/s

95th percentile per-packet one-way delay: 203.923 ms

Loss rate: 0.09%

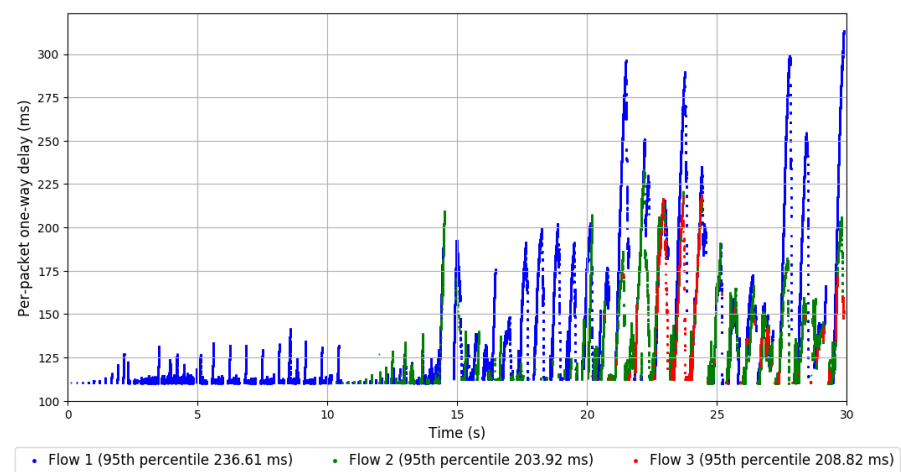
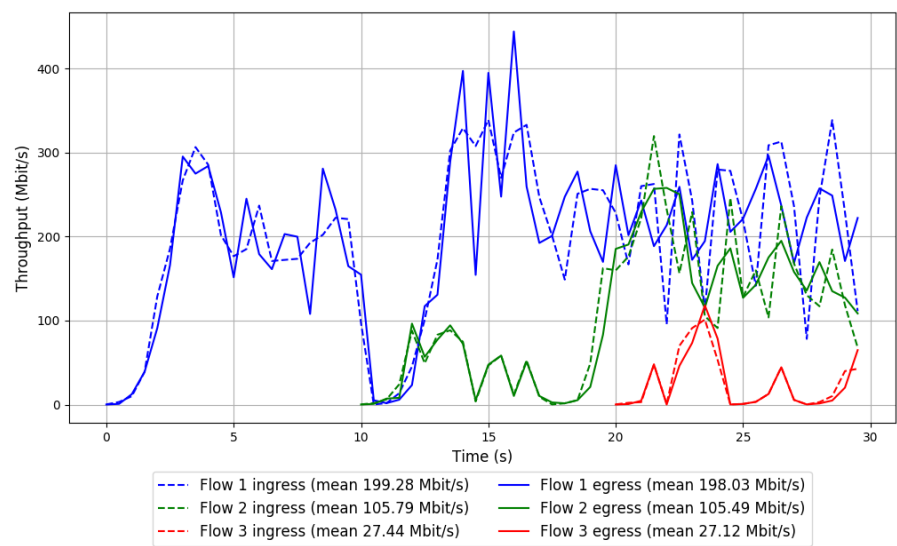
-- Flow 3:

Average throughput: 27.12 Mbit/s

95th percentile per-packet one-way delay: 208.818 ms

Loss rate: 0.82%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-28 15:22:22

End at: 2018-02-28 15:22:52

Below is generated by plot.py at 2018-02-28 18:21:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.00 Mbit/s

95th percentile per-packet one-way delay: 205.730 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 144.61 Mbit/s

95th percentile per-packet one-way delay: 191.717 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 182.17 Mbit/s

95th percentile per-packet one-way delay: 217.529 ms

Loss rate: 0.00%

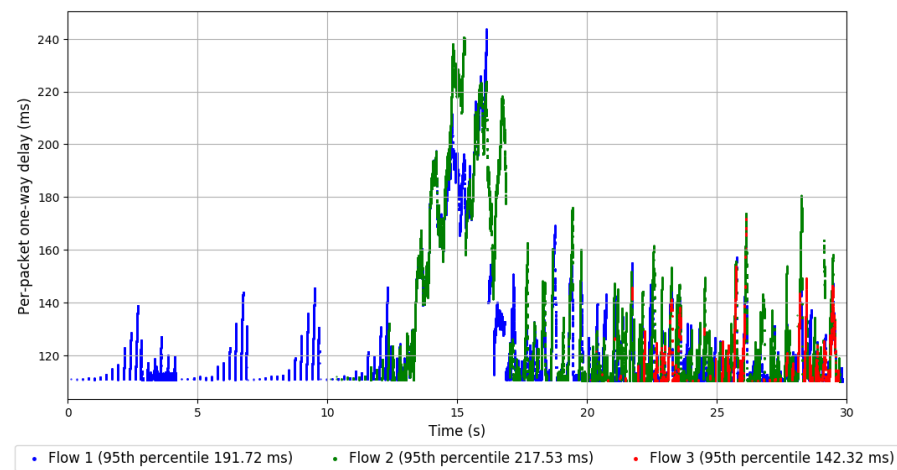
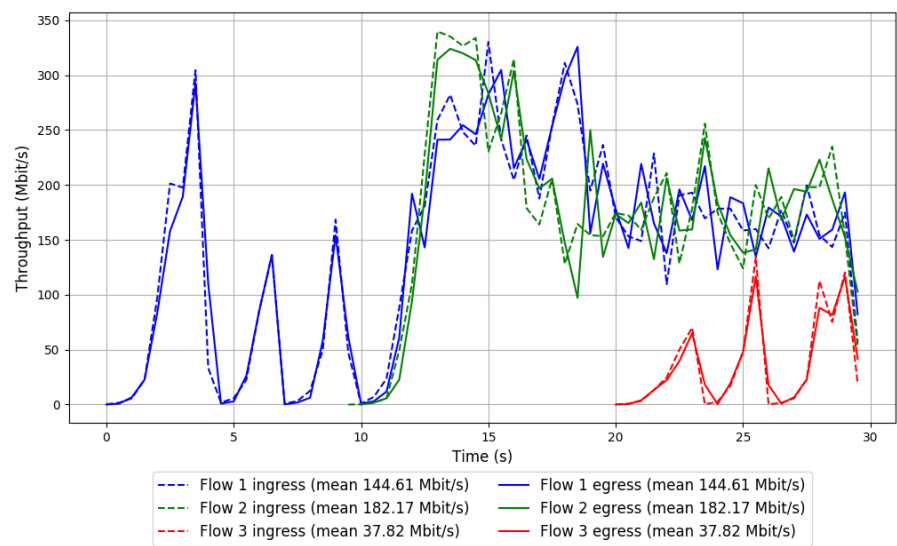
-- Flow 3:

Average throughput: 37.82 Mbit/s

95th percentile per-packet one-way delay: 142.316 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-28 12:28:37

End at: 2018-02-28 12:29:07

Below is generated by plot.py at 2018-02-28 18:21:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.34 Mbit/s

95th percentile per-packet one-way delay: 112.428 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.85 Mbit/s

95th percentile per-packet one-way delay: 112.216 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.89 Mbit/s

95th percentile per-packet one-way delay: 112.985 ms

Loss rate: 0.00%

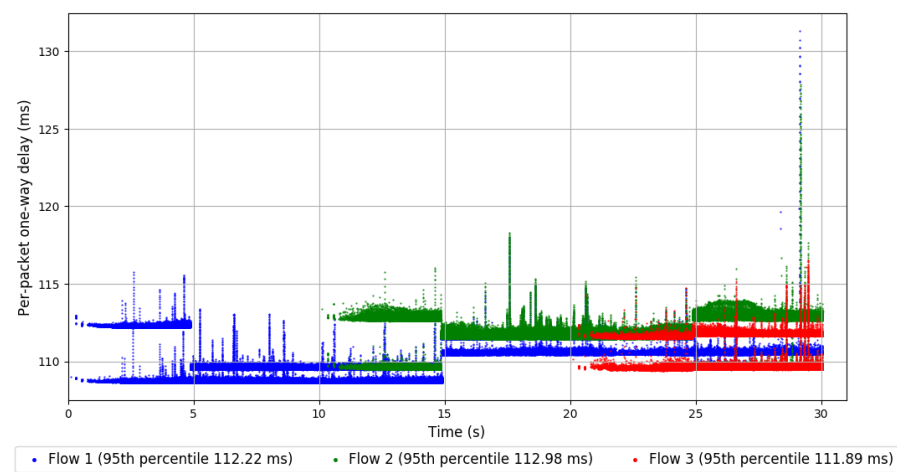
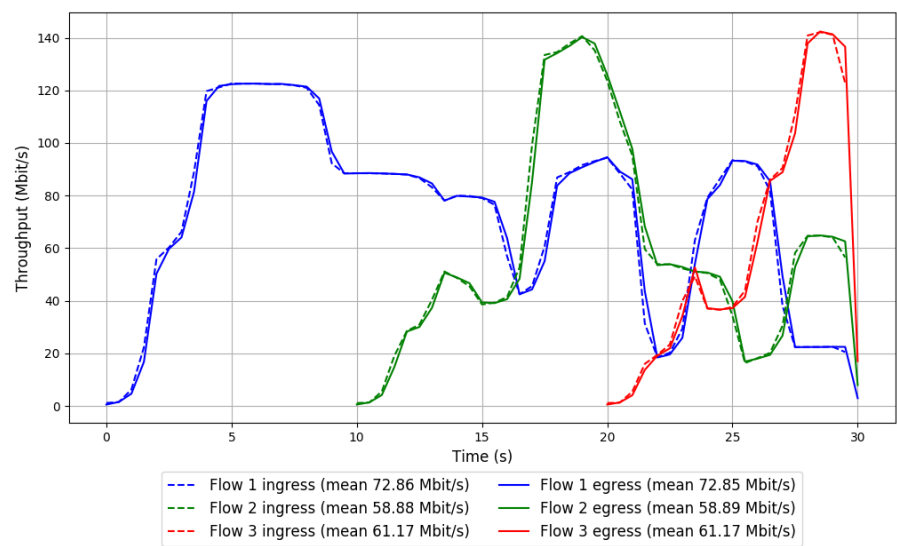
-- Flow 3:

Average throughput: 61.17 Mbit/s

95th percentile per-packet one-way delay: 111.888 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-28 12:47:58

End at: 2018-02-28 12:48:28

Below is generated by plot.py at 2018-02-28 18:21:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.49 Mbit/s

95th percentile per-packet one-way delay: 112.619 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.38 Mbit/s

95th percentile per-packet one-way delay: 111.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.31 Mbit/s

95th percentile per-packet one-way delay: 112.741 ms

Loss rate: 0.00%

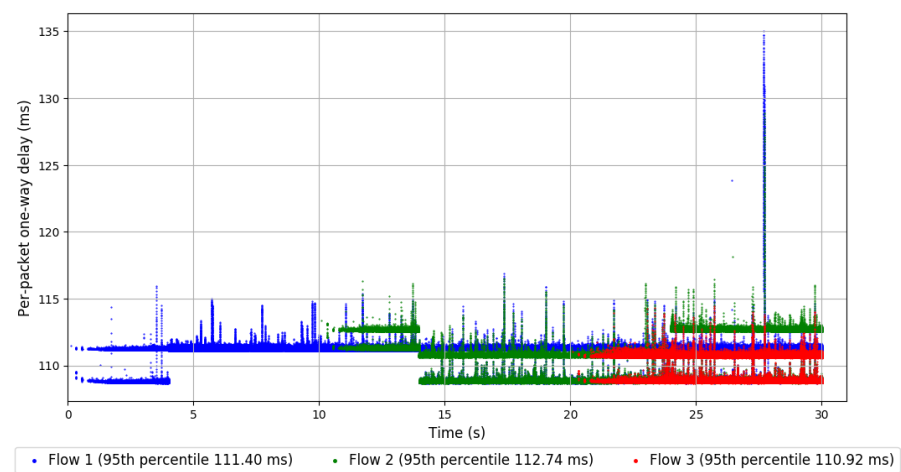
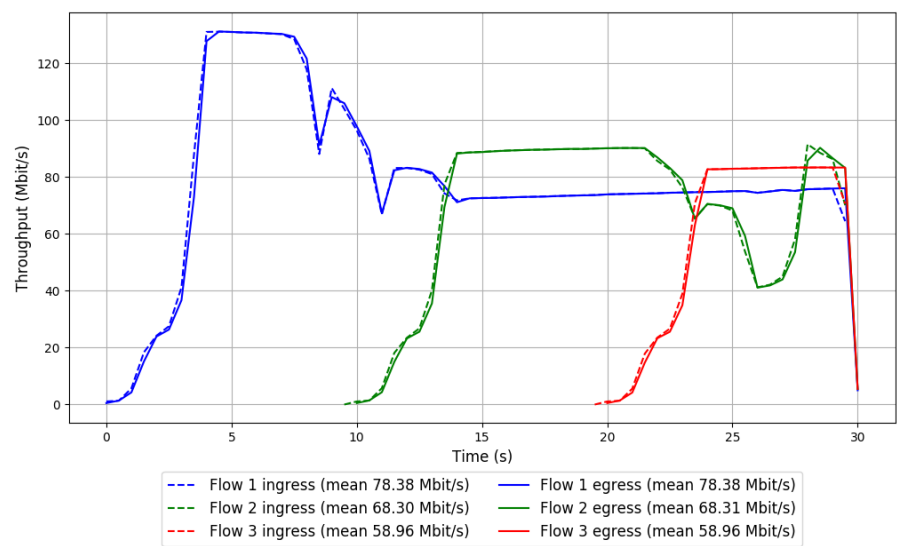
-- Flow 3:

Average throughput: 58.96 Mbit/s

95th percentile per-packet one-way delay: 110.915 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-28 13:07:46

End at: 2018-02-28 13:08:16

Below is generated by plot.py at 2018-02-28 18:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.69 Mbit/s

95th percentile per-packet one-way delay: 324.796 ms

Loss rate: 34.52%

-- Flow 1:

Average throughput: 317.87 Mbit/s

95th percentile per-packet one-way delay: 325.418 ms

Loss rate: 38.76%

-- Flow 2:

Average throughput: 32.38 Mbit/s

95th percentile per-packet one-way delay: 112.557 ms

Loss rate: 0.16%

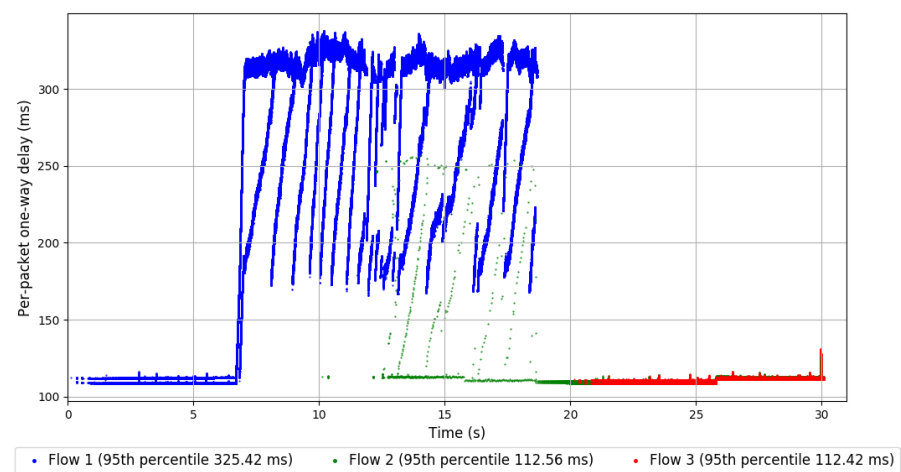
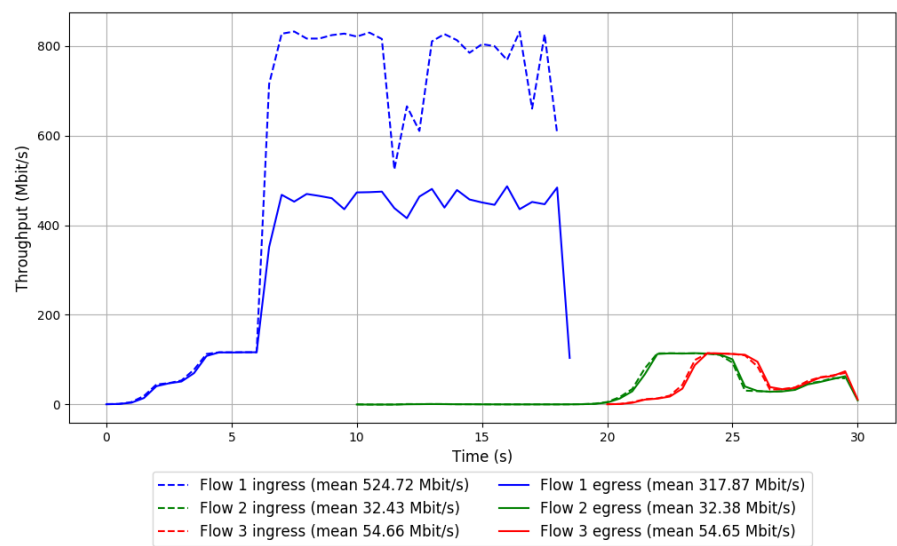
-- Flow 3:

Average throughput: 54.65 Mbit/s

95th percentile per-packet one-way delay: 112.424 ms

Loss rate: 0.02%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-28 13:27:33

End at: 2018-02-28 13:28:03

Below is generated by plot.py at 2018-02-28 18:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.47 Mbit/s

95th percentile per-packet one-way delay: 112.159 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.09 Mbit/s

95th percentile per-packet one-way delay: 112.162 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.72 Mbit/s

95th percentile per-packet one-way delay: 112.154 ms

Loss rate: 0.00%

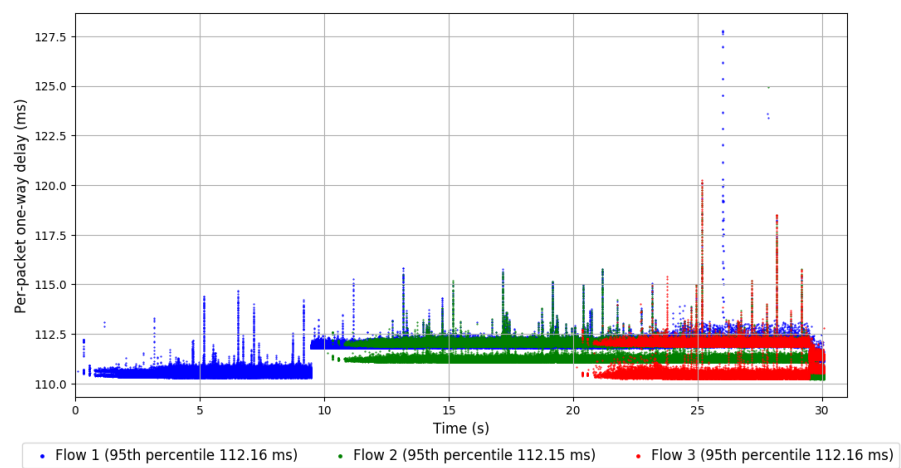
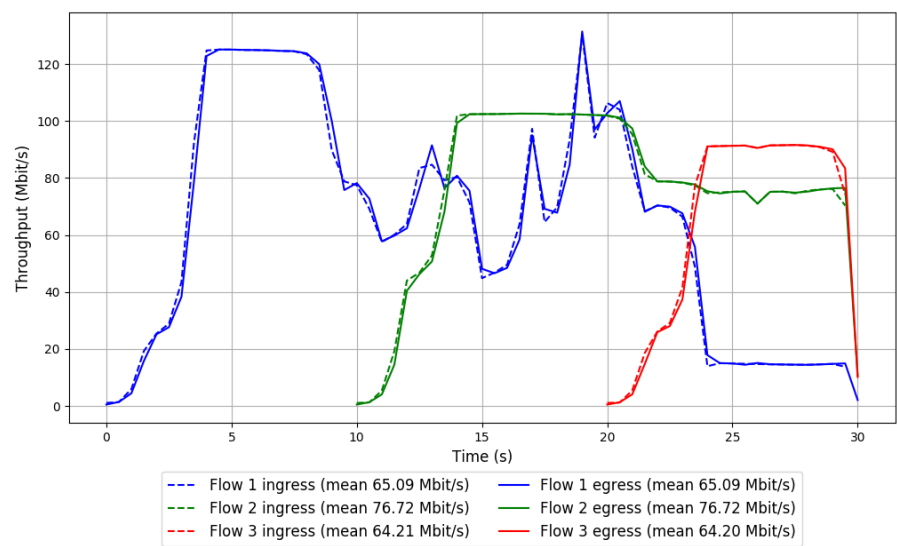
-- Flow 3:

Average throughput: 64.20 Mbit/s

95th percentile per-packet one-way delay: 112.161 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-28 13:47:31

End at: 2018-02-28 13:48:01

Below is generated by plot.py at 2018-02-28 18:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.96 Mbit/s

95th percentile per-packet one-way delay: 111.419 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.97 Mbit/s

95th percentile per-packet one-way delay: 110.836 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.10 Mbit/s

95th percentile per-packet one-way delay: 110.730 ms

Loss rate: 0.00%

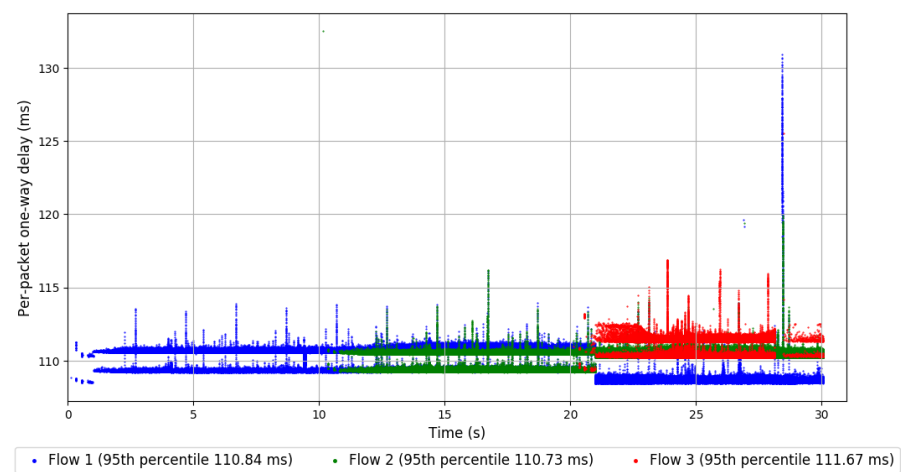
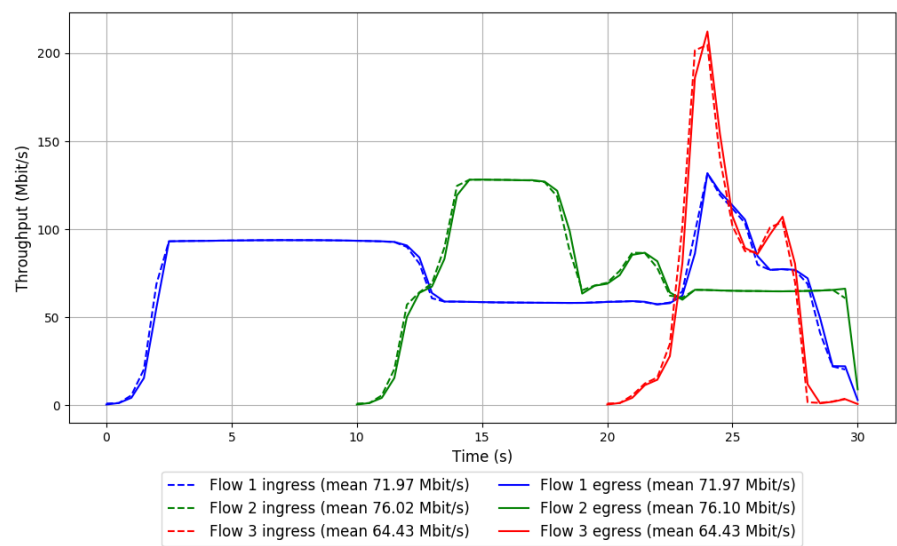
-- Flow 3:

Average throughput: 64.43 Mbit/s

95th percentile per-packet one-way delay: 111.666 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-28 14:07:23

End at: 2018-02-28 14:07:53

Below is generated by plot.py at 2018-02-28 18:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.33 Mbit/s

95th percentile per-packet one-way delay: 112.417 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.64 Mbit/s

95th percentile per-packet one-way delay: 112.393 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.43 Mbit/s

95th percentile per-packet one-way delay: 112.449 ms

Loss rate: 0.00%

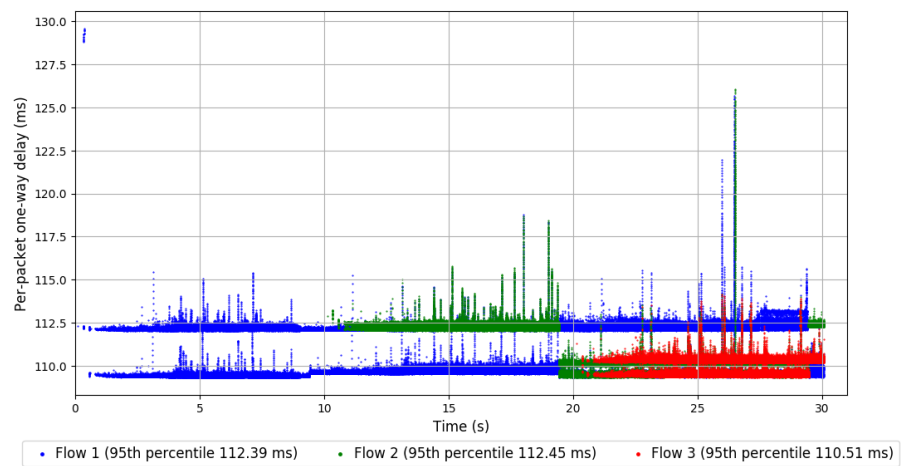
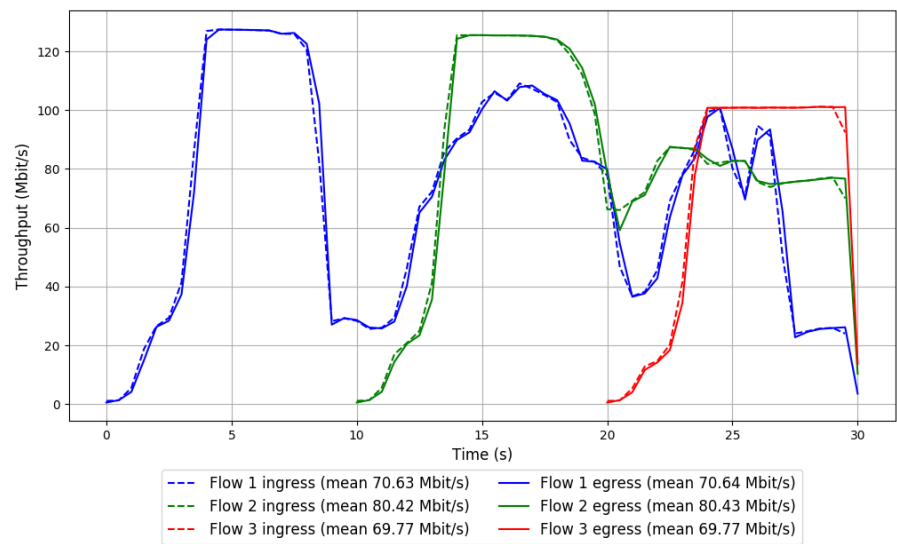
-- Flow 3:

Average throughput: 69.77 Mbit/s

95th percentile per-packet one-way delay: 110.513 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-28 14:27:10

End at: 2018-02-28 14:27:40

Below is generated by plot.py at 2018-02-28 18:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.12 Mbit/s

95th percentile per-packet one-way delay: 112.672 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 83.09 Mbit/s

95th percentile per-packet one-way delay: 111.564 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 74.17 Mbit/s

95th percentile per-packet one-way delay: 111.497 ms

Loss rate: 0.01%

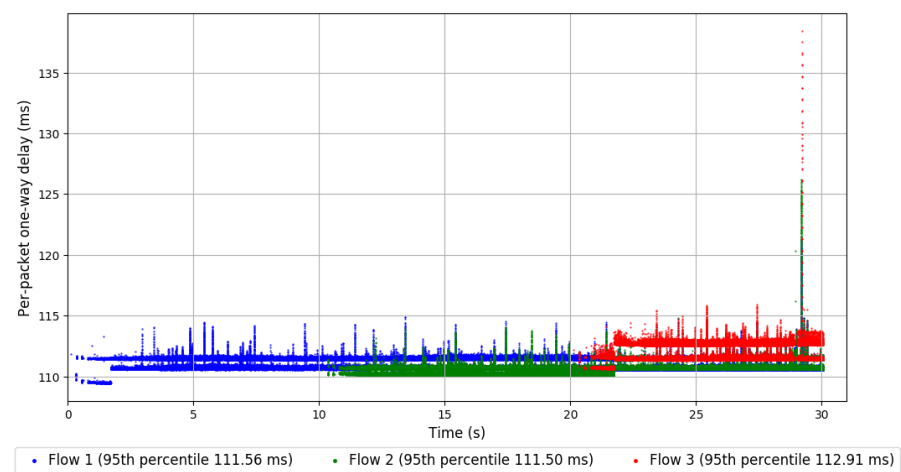
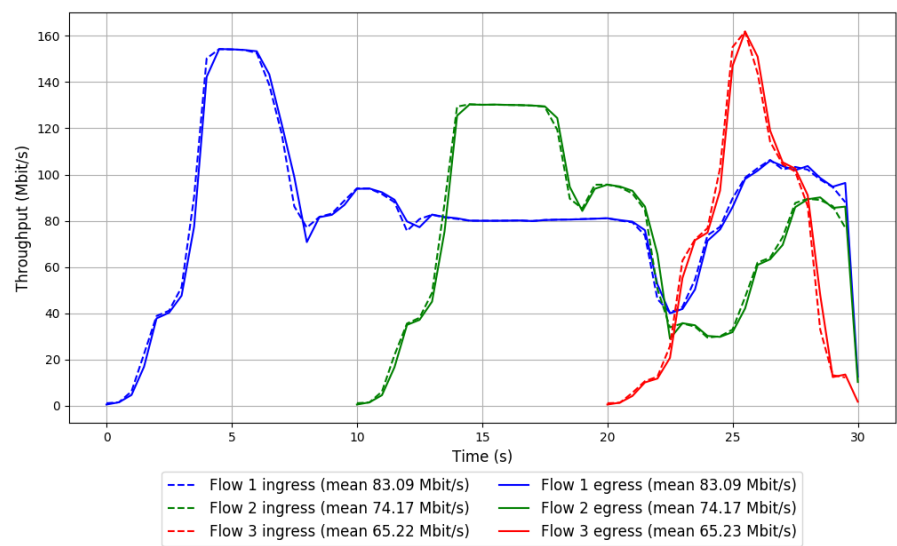
-- Flow 3:

Average throughput: 65.23 Mbit/s

95th percentile per-packet one-way delay: 112.906 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-28 14:47:07

End at: 2018-02-28 14:47:37

Below is generated by plot.py at 2018-02-28 18:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.82 Mbit/s

95th percentile per-packet one-way delay: 112.719 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.29 Mbit/s

95th percentile per-packet one-way delay: 112.752 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.70 Mbit/s

95th percentile per-packet one-way delay: 112.649 ms

Loss rate: 0.00%

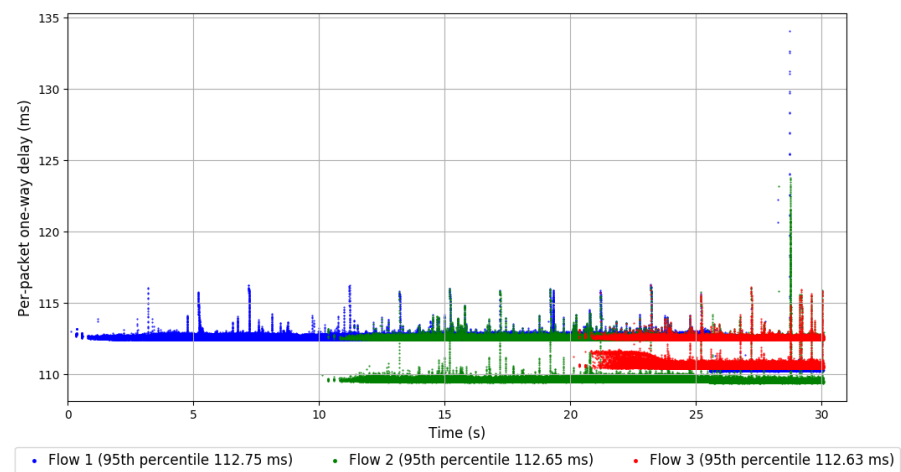
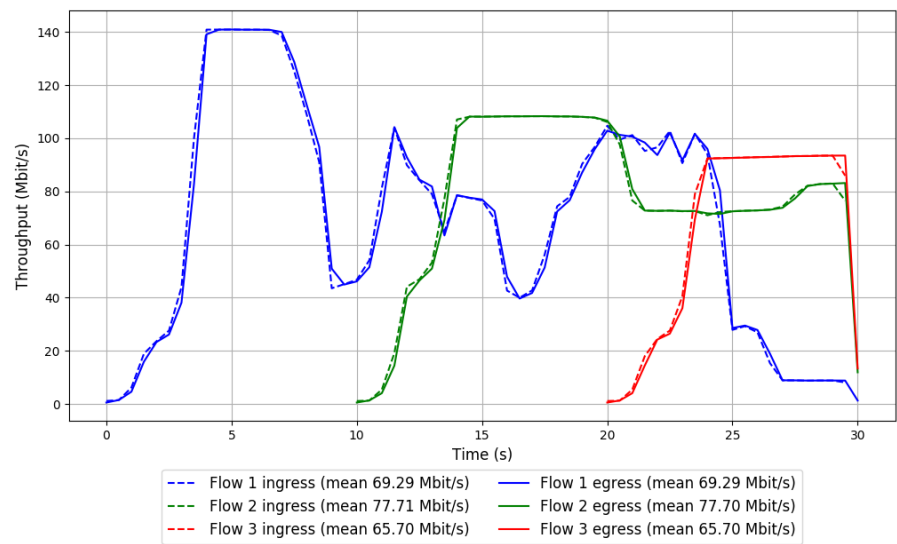
-- Flow 3:

Average throughput: 65.70 Mbit/s

95th percentile per-packet one-way delay: 112.632 ms

Loss rate: 0.01%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-28 15:06:41

End at: 2018-02-28 15:07:11

Below is generated by plot.py at 2018-02-28 18:38:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 572.69 Mbit/s

95th percentile per-packet one-way delay: 316.473 ms

Loss rate: 24.49%

-- Flow 1:

Average throughput: 286.83 Mbit/s

95th percentile per-packet one-way delay: 319.783 ms

Loss rate: 25.89%

-- Flow 2:

Average throughput: 428.15 Mbit/s

95th percentile per-packet one-way delay: 300.756 ms

Loss rate: 23.03%

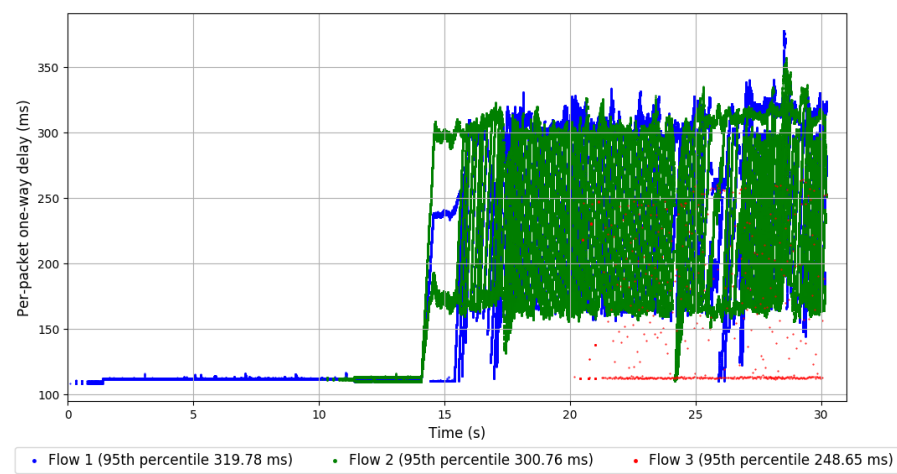
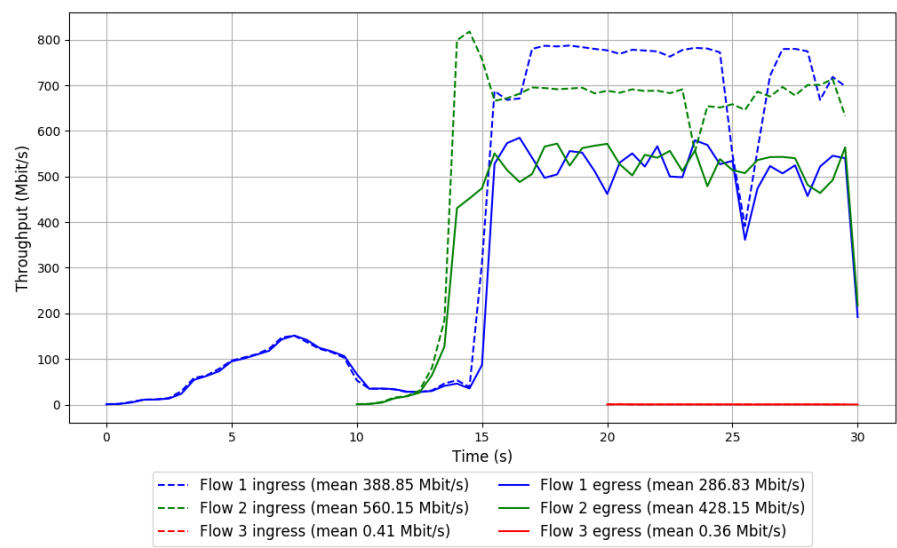
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 248.654 ms

Loss rate: 11.23%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-28 15:27:26

End at: 2018-02-28 15:27:56

Below is generated by plot.py at 2018-02-28 18:38:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.01 Mbit/s

95th percentile per-packet one-way delay: 112.238 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.21 Mbit/s

95th percentile per-packet one-way delay: 110.822 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 112.243 ms

Loss rate: 0.00%

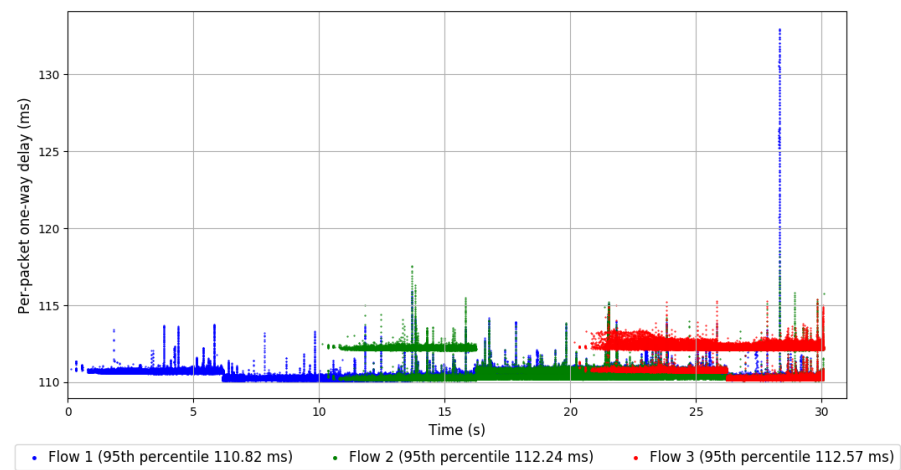
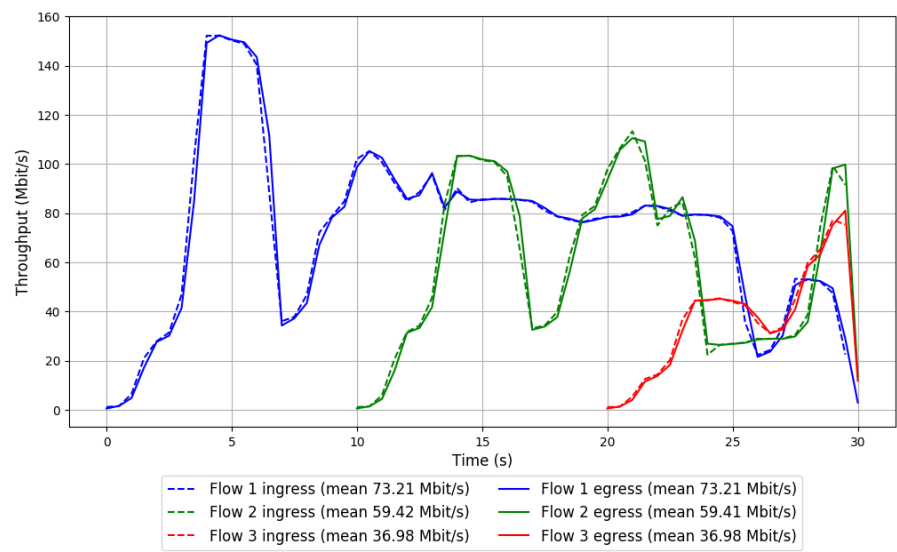
-- Flow 3:

Average throughput: 36.98 Mbit/s

95th percentile per-packet one-way delay: 112.573 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

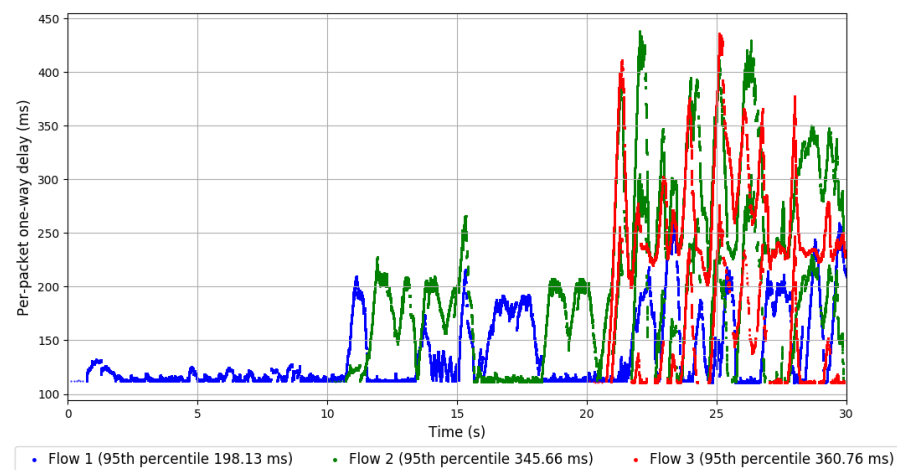
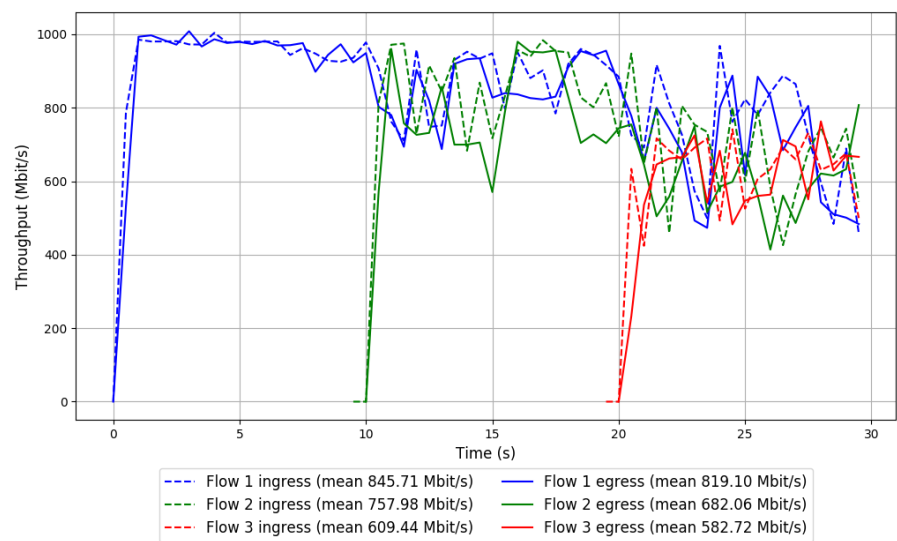


```
Run 1: Statistics of FillP

Start at: 2018-02-28 12:33:48
End at: 2018-02-28 12:34:18

# Below is generated by plot.py at 2018-02-28 18:47:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1466.14 Mbit/s
95th percentile per-packet one-way delay: 314.317 ms
Loss rate: 5.55%
-- Flow 1:
Average throughput: 819.10 Mbit/s
95th percentile per-packet one-way delay: 198.129 ms
Loss rate: 3.15%
-- Flow 2:
Average throughput: 682.06 Mbit/s
95th percentile per-packet one-way delay: 345.661 ms
Loss rate: 10.02%
-- Flow 3:
Average throughput: 582.72 Mbit/s
95th percentile per-packet one-way delay: 360.758 ms
Loss rate: 4.39%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-28 12:53:10

End at: 2018-02-28 12:53:40

Below is generated by plot.py at 2018-02-28 18:51:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1615.69 Mbit/s

95th percentile per-packet one-way delay: 208.833 ms

Loss rate: 7.03%

-- Flow 1:

Average throughput: 842.40 Mbit/s

95th percentile per-packet one-way delay: 204.906 ms

Loss rate: 6.39%

-- Flow 2:

Average throughput: 815.20 Mbit/s

95th percentile per-packet one-way delay: 207.539 ms

Loss rate: 6.08%

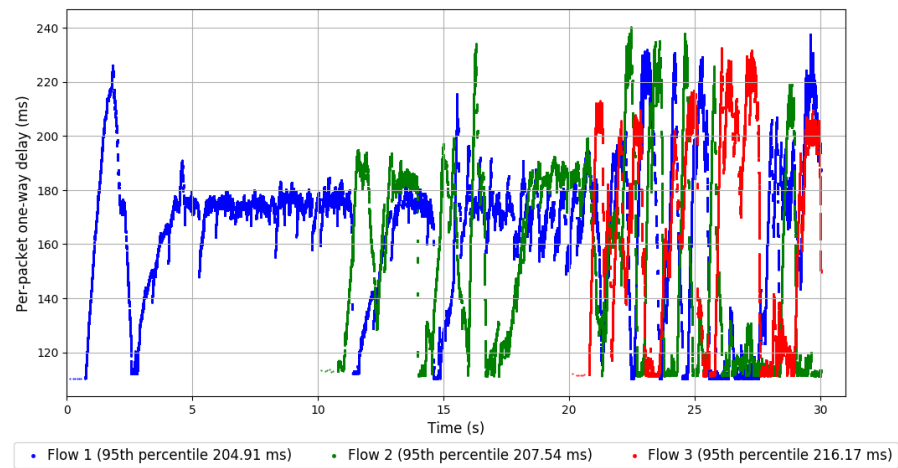
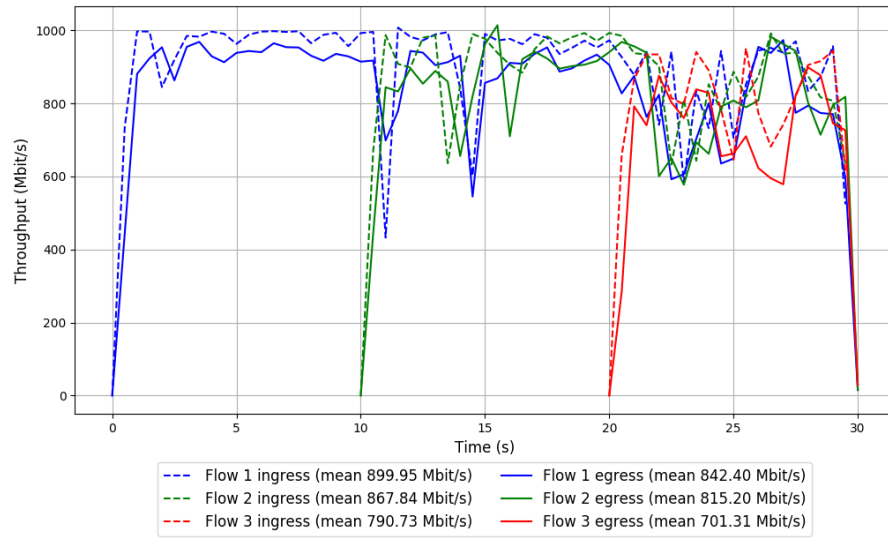
-- Flow 3:

Average throughput: 701.31 Mbit/s

95th percentile per-packet one-way delay: 216.168 ms

Loss rate: 11.31%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-28 13:13:08

End at: 2018-02-28 13:13:38

Below is generated by plot.py at 2018-02-28 18:51:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1545.19 Mbit/s

95th percentile per-packet one-way delay: 248.370 ms

Loss rate: 5.93%

-- Flow 1:

Average throughput: 825.63 Mbit/s

95th percentile per-packet one-way delay: 280.096 ms

Loss rate: 3.84%

-- Flow 2:

Average throughput: 752.69 Mbit/s

95th percentile per-packet one-way delay: 216.947 ms

Loss rate: 6.27%

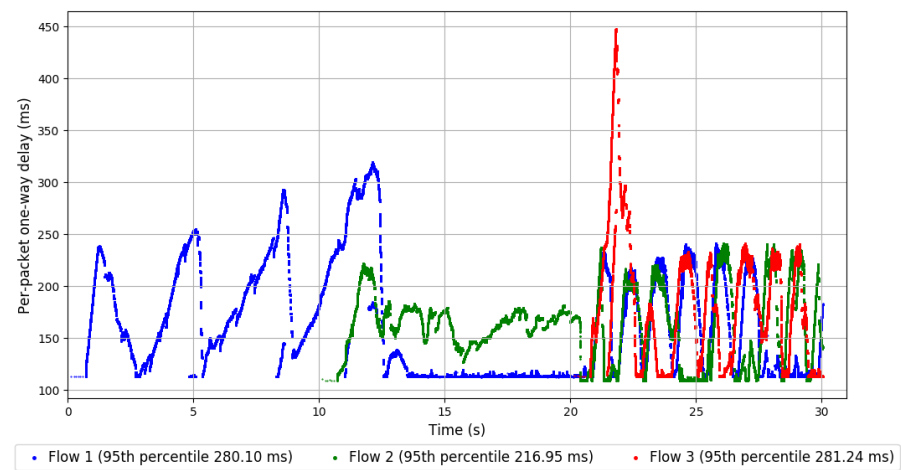
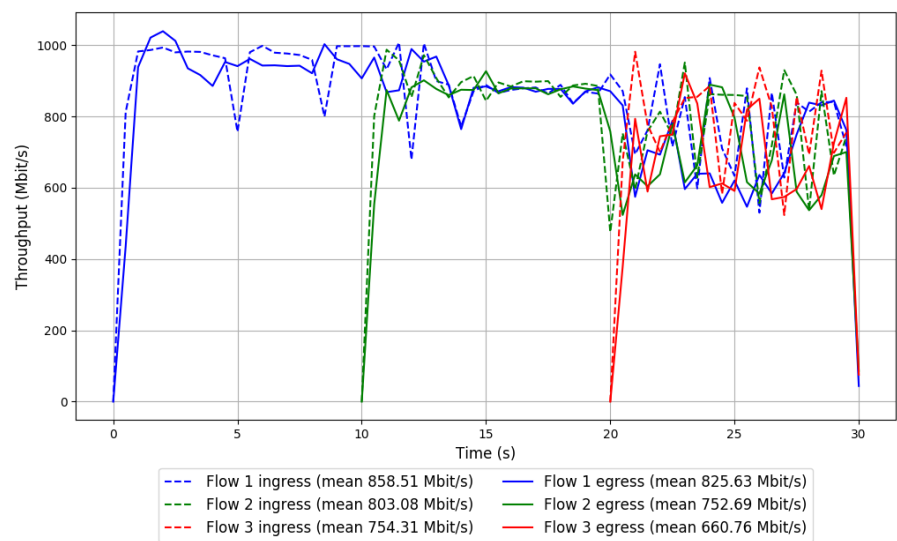
-- Flow 3:

Average throughput: 660.76 Mbit/s

95th percentile per-packet one-way delay: 281.244 ms

Loss rate: 12.42%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-28 13:32:51

End at: 2018-02-28 13:33:21

Below is generated by plot.py at 2018-02-28 18:51:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1466.46 Mbit/s

95th percentile per-packet one-way delay: 347.863 ms

Loss rate: 9.21%

-- Flow 1:

Average throughput: 765.52 Mbit/s

95th percentile per-packet one-way delay: 346.349 ms

Loss rate: 7.99%

-- Flow 2:

Average throughput: 767.14 Mbit/s

95th percentile per-packet one-way delay: 215.399 ms

Loss rate: 9.49%

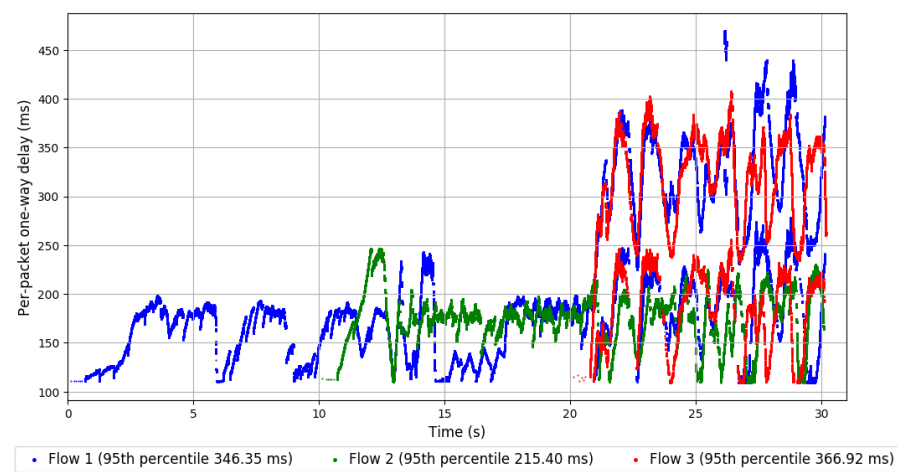
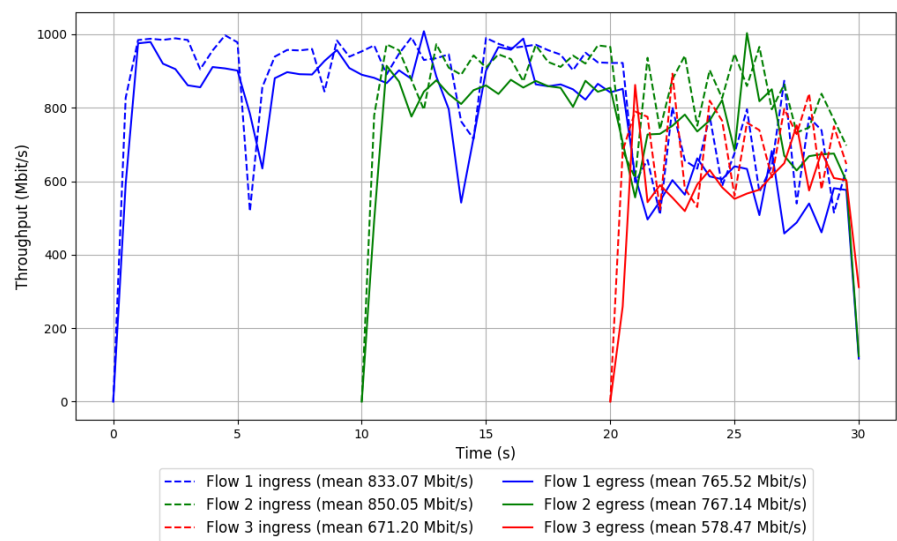
-- Flow 3:

Average throughput: 578.47 Mbit/s

95th percentile per-packet one-way delay: 366.921 ms

Loss rate: 13.04%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-28 13:52:45

End at: 2018-02-28 13:53:15

Below is generated by plot.py at 2018-02-28 18:52:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 1589.54 Mbit/s

95th percentile per-packet one-way delay: 218.222 ms

Loss rate: 4.93%

-- Flow 1:

Average throughput: 849.03 Mbit/s

95th percentile per-packet one-way delay: 230.951 ms

Loss rate: 5.99%

-- Flow 2:

Average throughput: 794.50 Mbit/s

95th percentile per-packet one-way delay: 200.964 ms

Loss rate: 3.58%

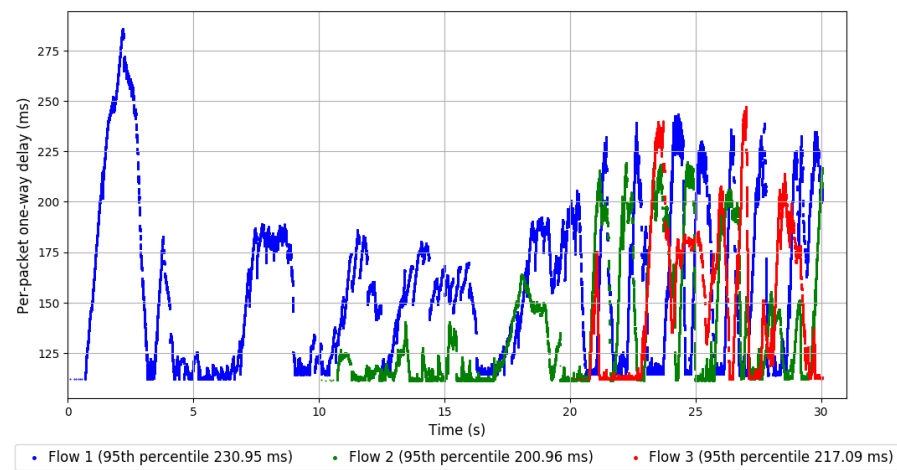
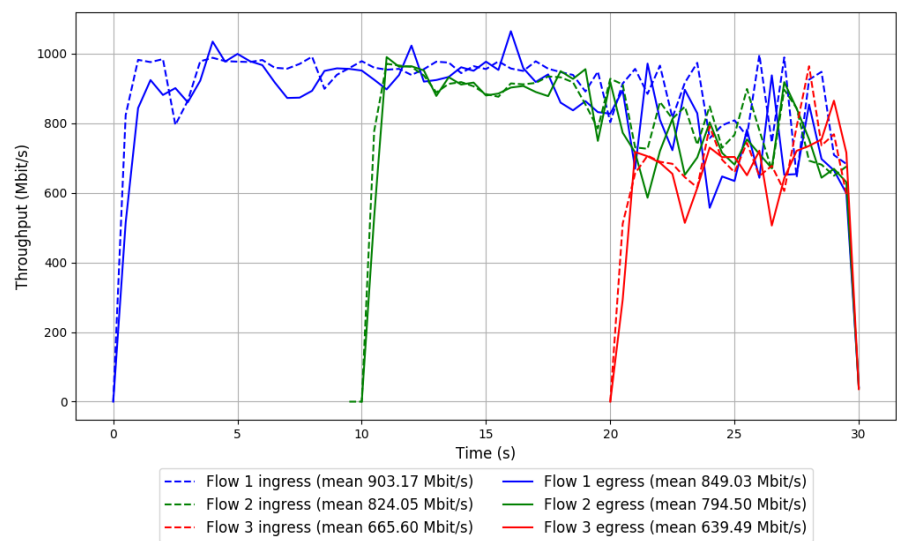
-- Flow 3:

Average throughput: 639.49 Mbit/s

95th percentile per-packet one-way delay: 217.094 ms

Loss rate: 3.92%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-28 14:12:36

End at: 2018-02-28 14:13:06

Below is generated by plot.py at 2018-02-28 18:52:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 1549.42 Mbit/s

95th percentile per-packet one-way delay: 285.697 ms

Loss rate: 8.36%

-- Flow 1:

Average throughput: 858.79 Mbit/s

95th percentile per-packet one-way delay: 304.085 ms

Loss rate: 4.16%

-- Flow 2:

Average throughput: 726.18 Mbit/s

95th percentile per-packet one-way delay: 226.581 ms

Loss rate: 11.71%

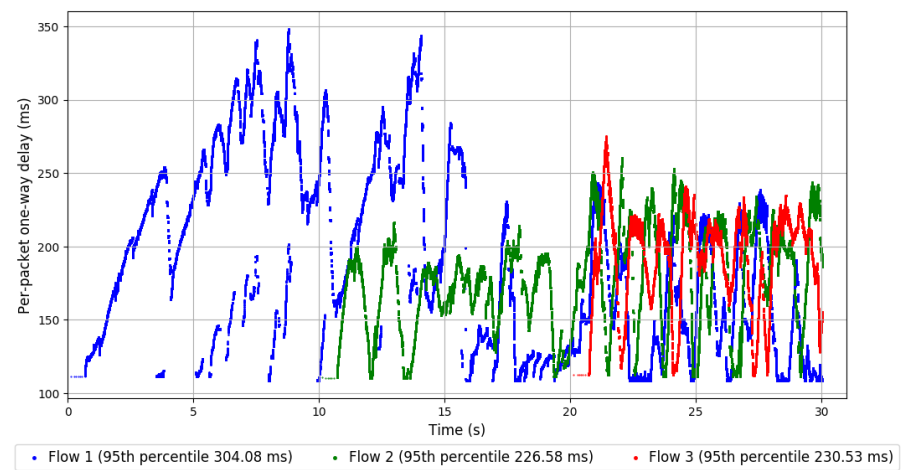
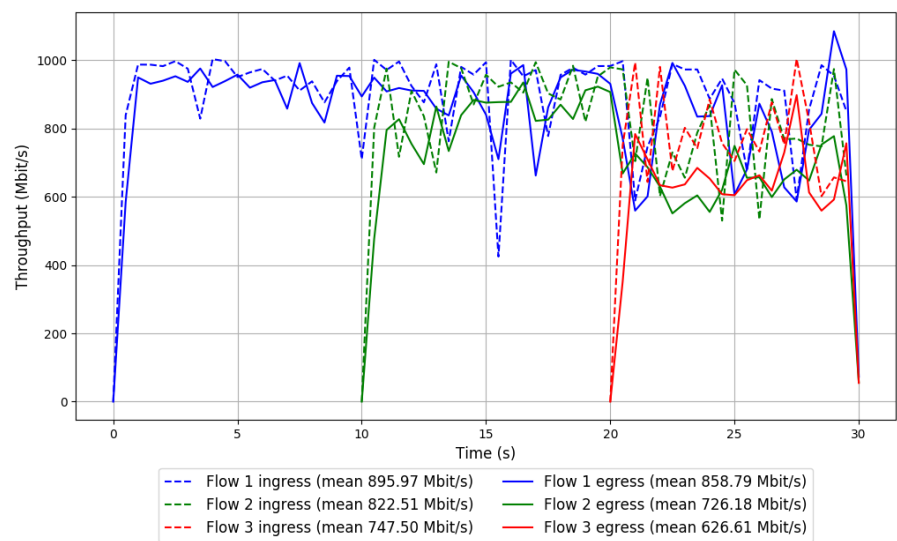
-- Flow 3:

Average throughput: 626.61 Mbit/s

95th percentile per-packet one-way delay: 230.529 ms

Loss rate: 16.18%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-28 14:32:33

End at: 2018-02-28 14:33:03

Below is generated by plot.py at 2018-02-28 18:55:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 1611.89 Mbit/s

95th percentile per-packet one-way delay: 222.029 ms

Loss rate: 5.32%

-- Flow 1:

Average throughput: 828.98 Mbit/s

95th percentile per-packet one-way delay: 226.602 ms

Loss rate: 6.29%

-- Flow 2:

Average throughput: 791.23 Mbit/s

95th percentile per-packet one-way delay: 208.857 ms

Loss rate: 4.57%

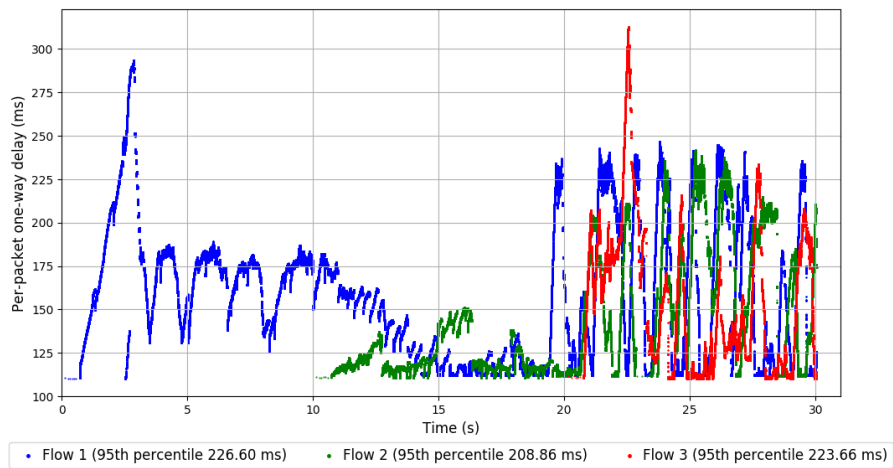
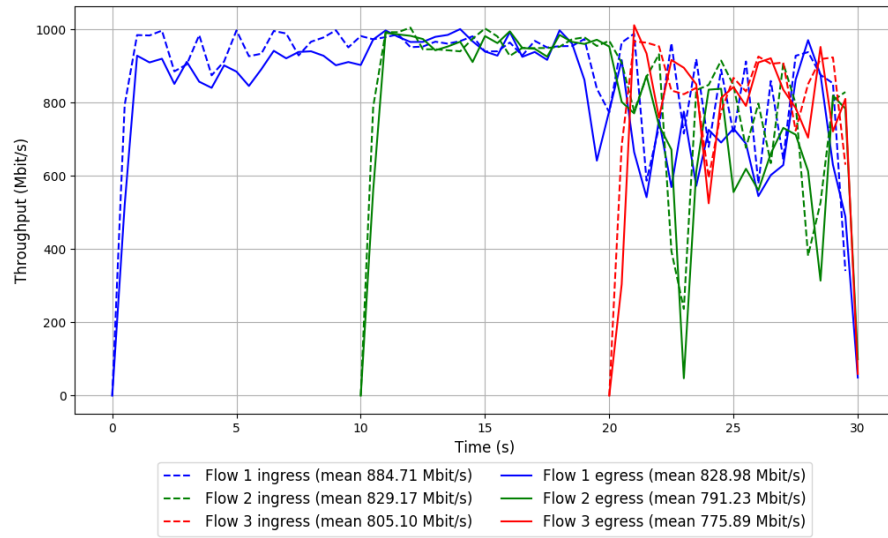
-- Flow 3:

Average throughput: 775.89 Mbit/s

95th percentile per-packet one-way delay: 223.657 ms

Loss rate: 3.64%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-28 14:52:23

End at: 2018-02-28 14:52:53

Below is generated by plot.py at 2018-02-28 19:10:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 1538.98 Mbit/s

95th percentile per-packet one-way delay: 293.555 ms

Loss rate: 8.97%

-- Flow 1:

Average throughput: 823.05 Mbit/s

95th percentile per-packet one-way delay: 206.292 ms

Loss rate: 6.68%

-- Flow 2:

Average throughput: 759.26 Mbit/s

95th percentile per-packet one-way delay: 331.887 ms

Loss rate: 8.97%

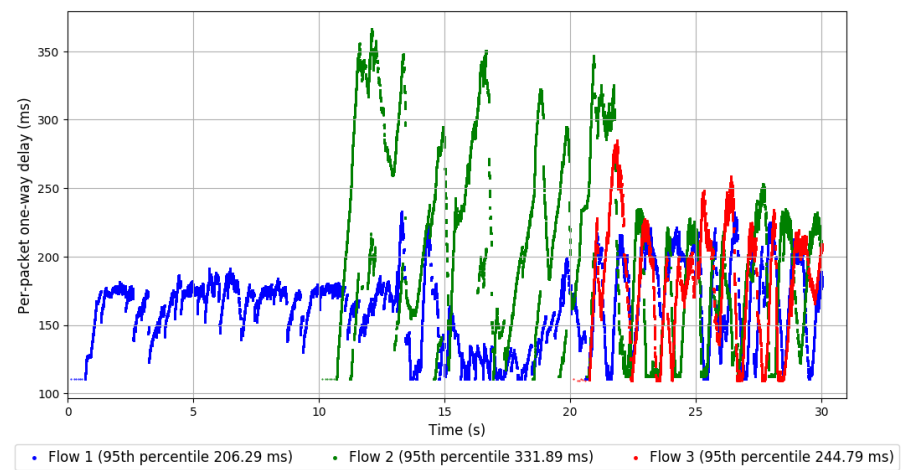
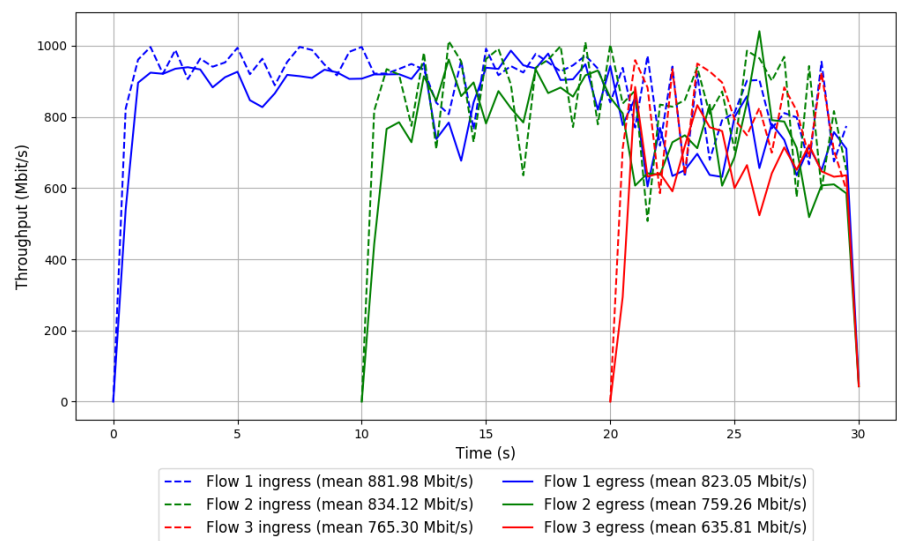
-- Flow 3:

Average throughput: 635.81 Mbit/s

95th percentile per-packet one-way delay: 244.793 ms

Loss rate: 16.91%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-28 15:12:37

End at: 2018-02-28 15:13:07

Below is generated by plot.py at 2018-02-28 19:18:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1599.48 Mbit/s

95th percentile per-packet one-way delay: 222.174 ms

Loss rate: 6.80%

-- Flow 1:

Average throughput: 845.89 Mbit/s

95th percentile per-packet one-way delay: 208.077 ms

Loss rate: 4.42%

-- Flow 2:

Average throughput: 790.47 Mbit/s

95th percentile per-packet one-way delay: 222.383 ms

Loss rate: 8.35%

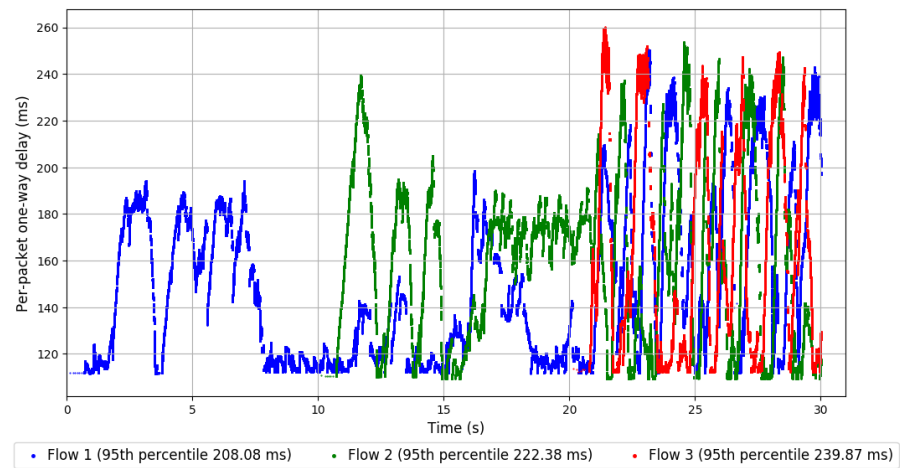
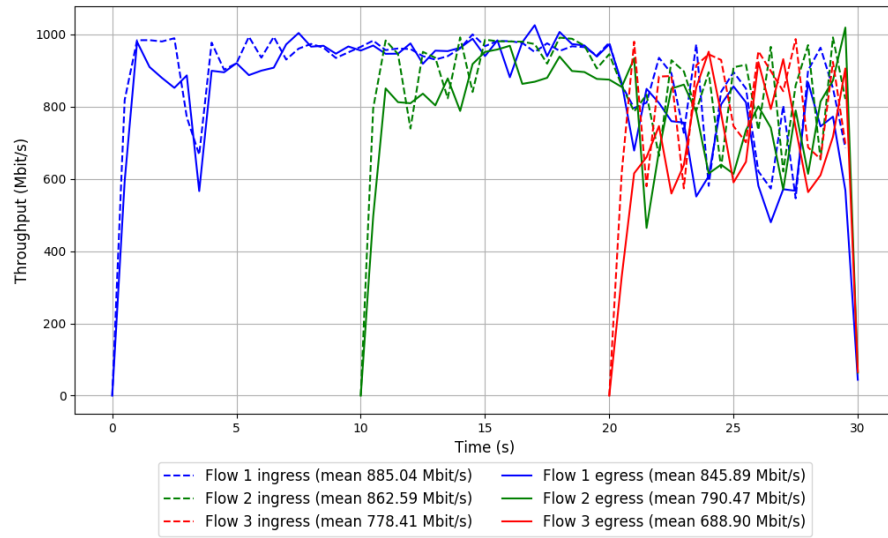
-- Flow 3:

Average throughput: 688.90 Mbit/s

95th percentile per-packet one-way delay: 239.872 ms

Loss rate: 11.52%

Run 9: Report of FillP — Data Link

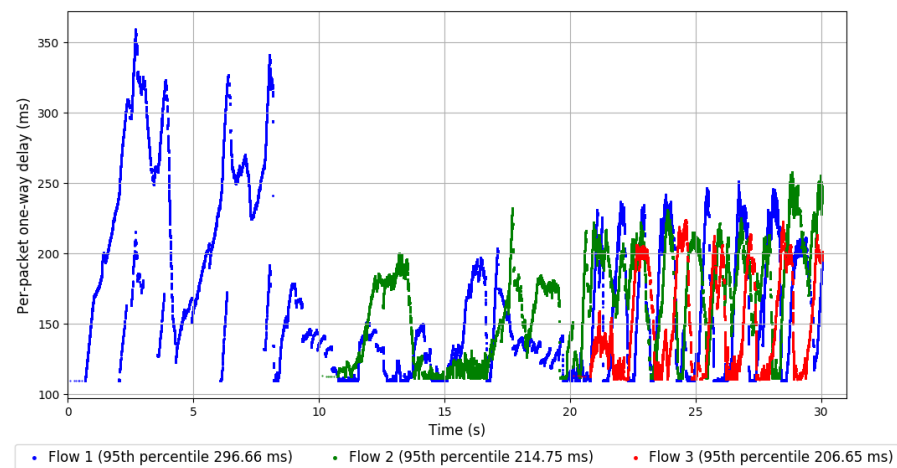
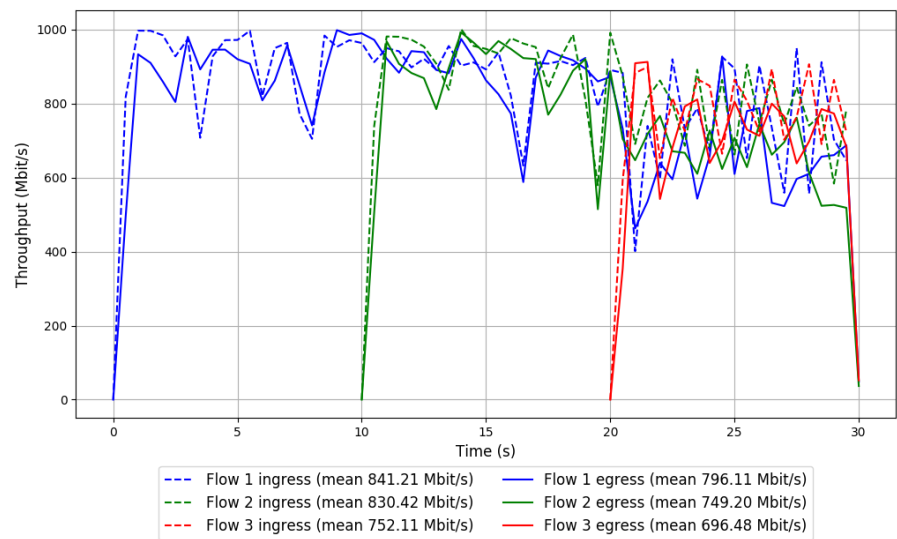


```
Run 10: Statistics of FillP

Start at: 2018-02-28 15:32:40
End at: 2018-02-28 15:33:10

# Below is generated by plot.py at 2018-02-28 19:18:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1524.77 Mbit/s
95th percentile per-packet one-way delay: 259.599 ms
Loss rate: 7.16%
-- Flow 1:
Average throughput: 796.11 Mbit/s
95th percentile per-packet one-way delay: 296.657 ms
Loss rate: 5.35%
-- Flow 2:
Average throughput: 749.20 Mbit/s
95th percentile per-packet one-way delay: 214.748 ms
Loss rate: 9.78%
-- Flow 3:
Average throughput: 696.48 Mbit/s
95th percentile per-packet one-way delay: 206.649 ms
Loss rate: 7.41%
```

Run 10: Report of FillP — Data Link

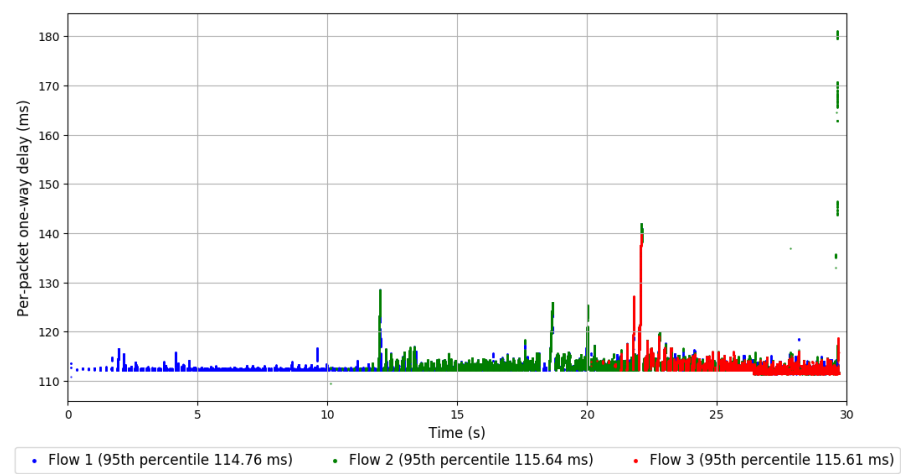
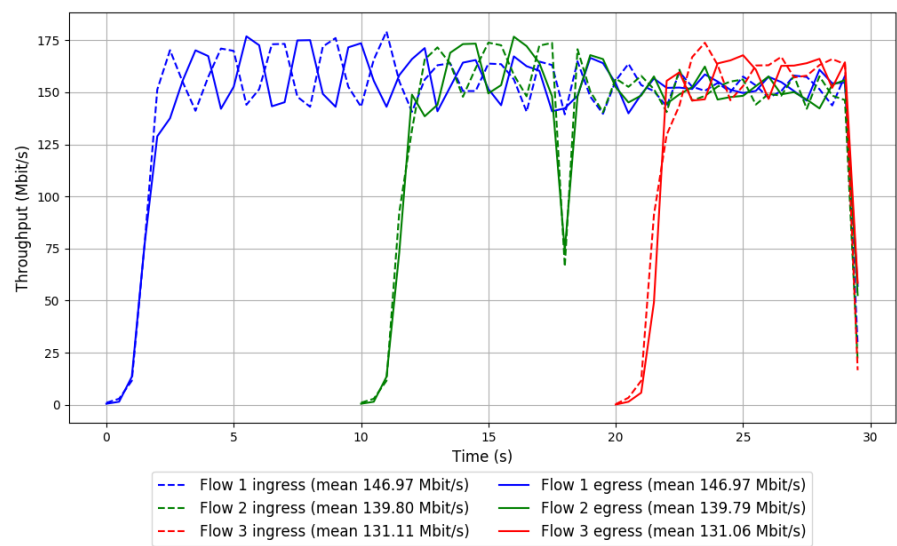


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-28 12:24:35
End at: 2018-02-28 12:25:05

# Below is generated by plot.py at 2018-02-28 19:18:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.65 Mbit/s
95th percentile per-packet one-way delay: 115.159 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 146.97 Mbit/s
95th percentile per-packet one-way delay: 114.756 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 139.79 Mbit/s
95th percentile per-packet one-way delay: 115.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 131.06 Mbit/s
95th percentile per-packet one-way delay: 115.608 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo-1-32 — Data Link

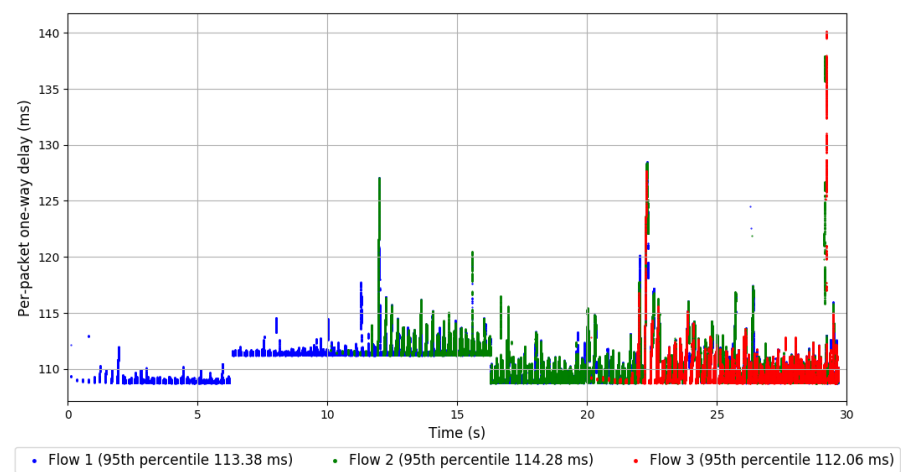
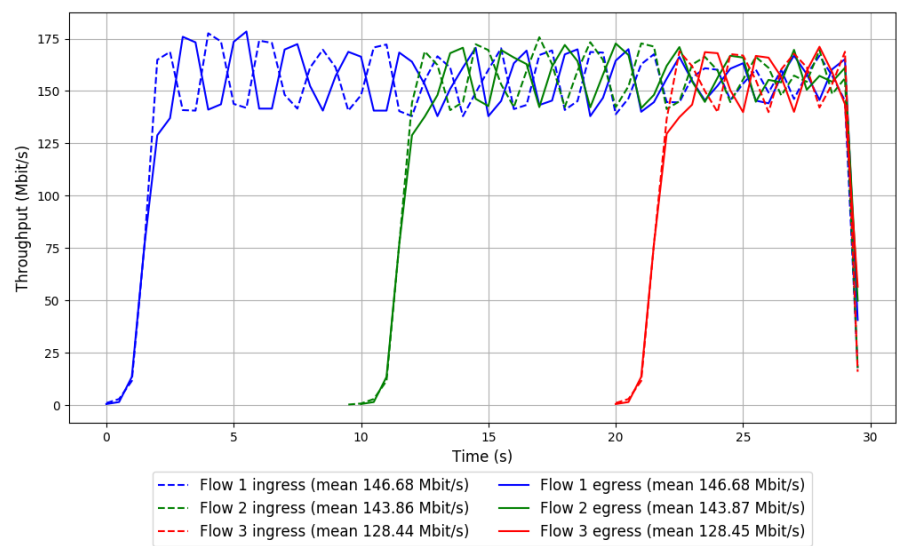


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-28 12:44:05
End at: 2018-02-28 12:44:35

# Below is generated by plot.py at 2018-02-28 19:18:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.21 Mbit/s
95th percentile per-packet one-way delay: 113.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 146.68 Mbit/s
95th percentile per-packet one-way delay: 113.383 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.87 Mbit/s
95th percentile per-packet one-way delay: 114.283 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 128.45 Mbit/s
95th percentile per-packet one-way delay: 112.060 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-28 13:03:53

End at: 2018-02-28 13:04:23

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.61 Mbit/s

95th percentile per-packet one-way delay: 113.882 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 150.24 Mbit/s

95th percentile per-packet one-way delay: 113.812 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.22 Mbit/s

95th percentile per-packet one-way delay: 114.086 ms

Loss rate: 0.00%

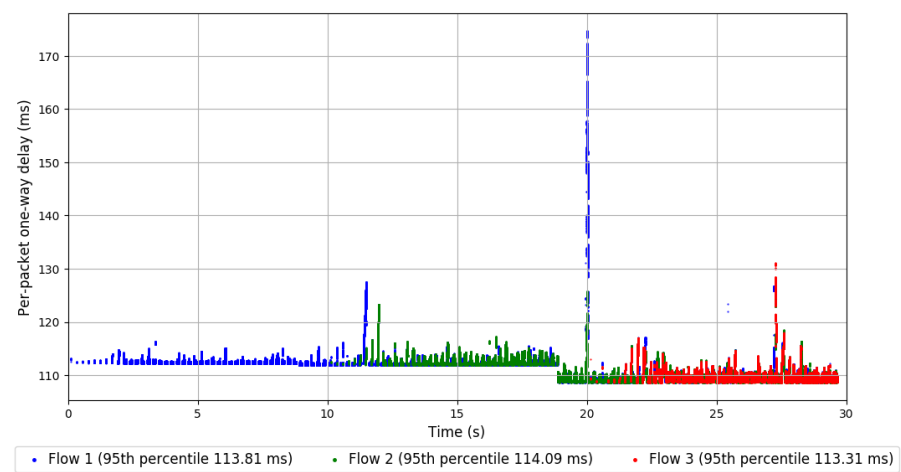
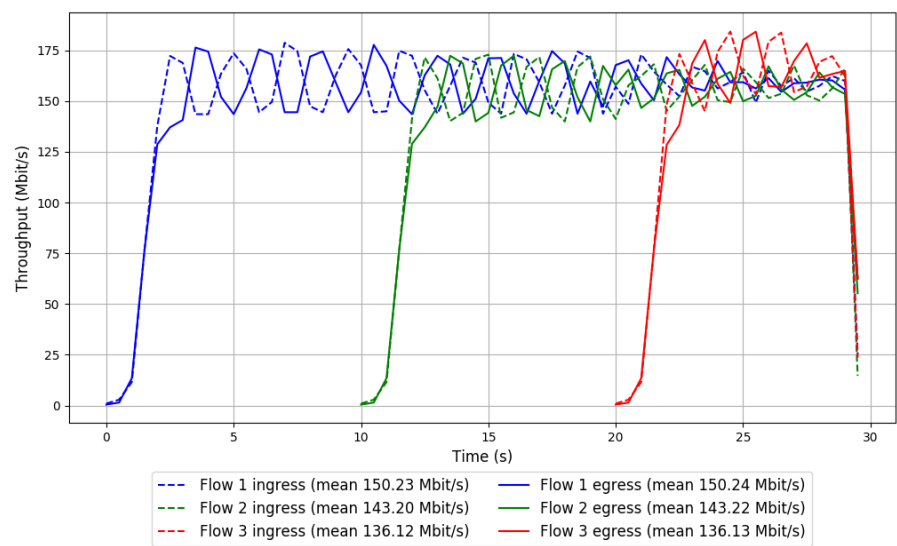
-- Flow 3:

Average throughput: 136.13 Mbit/s

95th percentile per-packet one-way delay: 113.312 ms

Loss rate: 0.00%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-28 13:23:41

End at: 2018-02-28 13:24:11

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 279.42 Mbit/s

95th percentile per-packet one-way delay: 113.647 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 141.54 Mbit/s

95th percentile per-packet one-way delay: 113.613 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.76 Mbit/s

95th percentile per-packet one-way delay: 113.876 ms

Loss rate: 0.00%

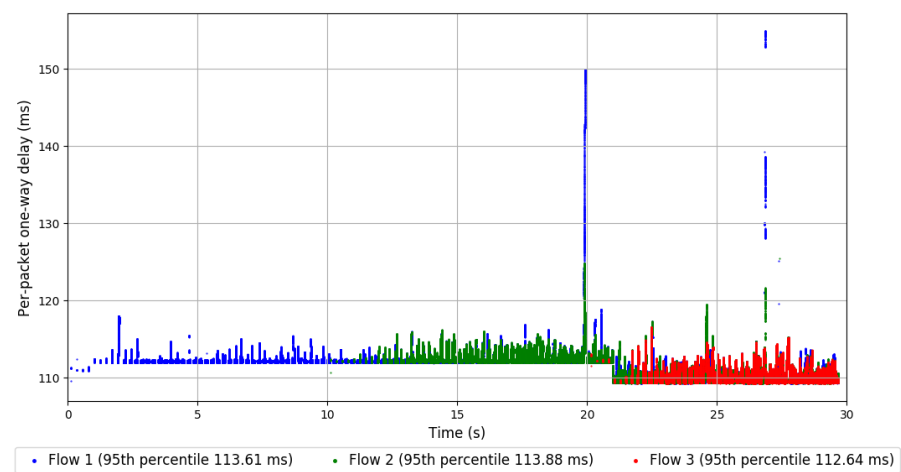
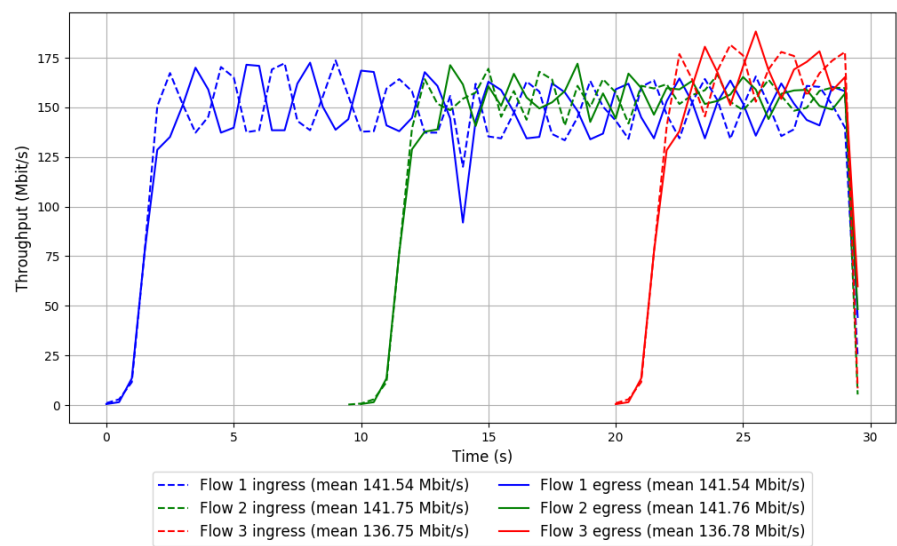
-- Flow 3:

Average throughput: 136.78 Mbit/s

95th percentile per-packet one-way delay: 112.640 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-28 13:43:33

End at: 2018-02-28 13:44:03

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 351.33 Mbit/s

95th percentile per-packet one-way delay: 115.164 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 214.19 Mbit/s

95th percentile per-packet one-way delay: 113.683 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.09 Mbit/s

95th percentile per-packet one-way delay: 115.479 ms

Loss rate: 0.00%

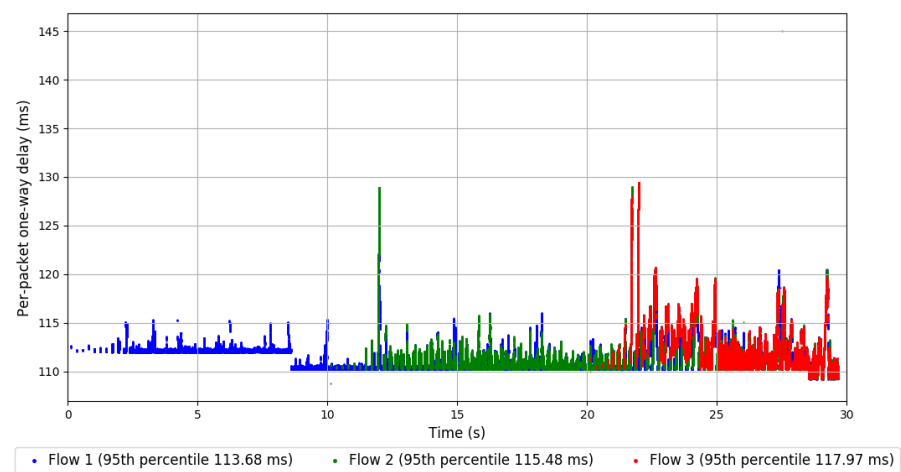
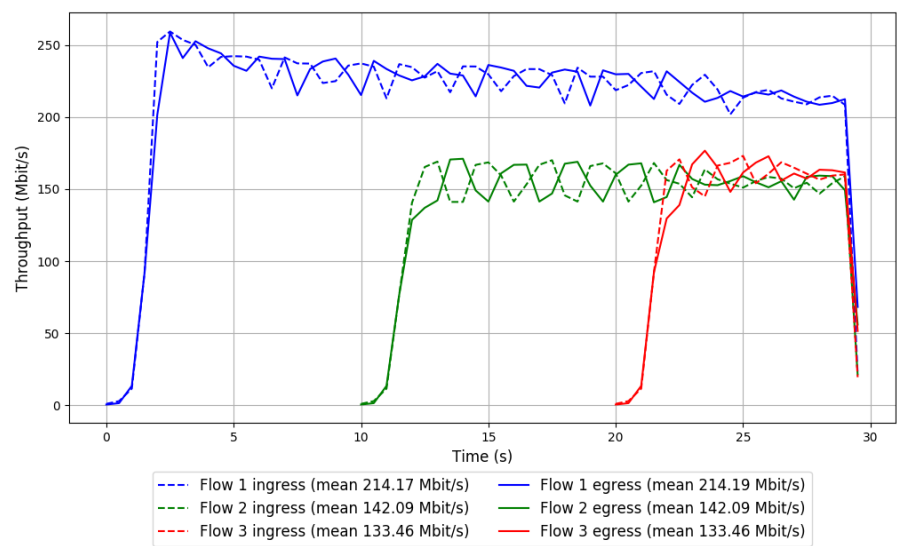
-- Flow 3:

Average throughput: 133.46 Mbit/s

95th percentile per-packet one-way delay: 117.970 ms

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-28 14:03:30

End at: 2018-02-28 14:04:00

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.10 Mbit/s

95th percentile per-packet one-way delay: 114.273 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 149.29 Mbit/s

95th percentile per-packet one-way delay: 113.892 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.25 Mbit/s

95th percentile per-packet one-way delay: 114.714 ms

Loss rate: 0.06%

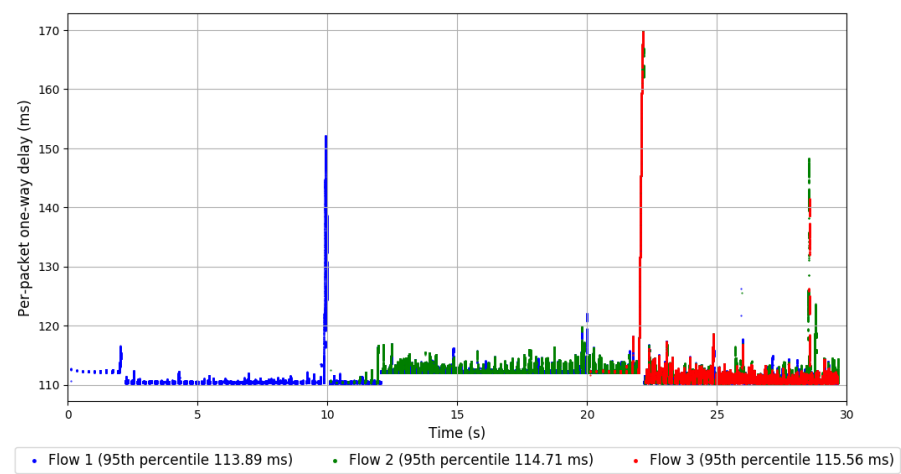
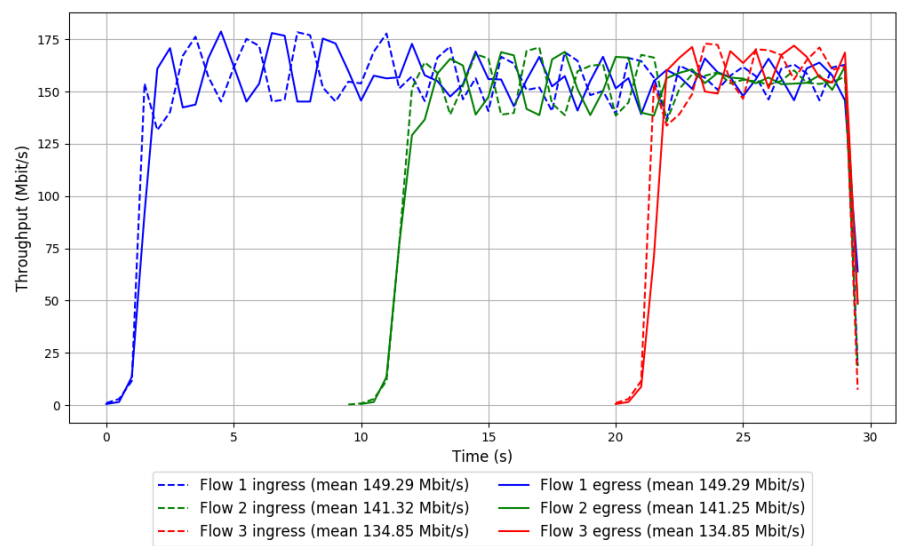
-- Flow 3:

Average throughput: 134.85 Mbit/s

95th percentile per-packet one-way delay: 115.563 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-28 14:23:18

End at: 2018-02-28 14:23:48

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.48 Mbit/s

95th percentile per-packet one-way delay: 113.795 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 146.99 Mbit/s

95th percentile per-packet one-way delay: 113.247 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.03 Mbit/s

95th percentile per-packet one-way delay: 114.237 ms

Loss rate: 0.00%

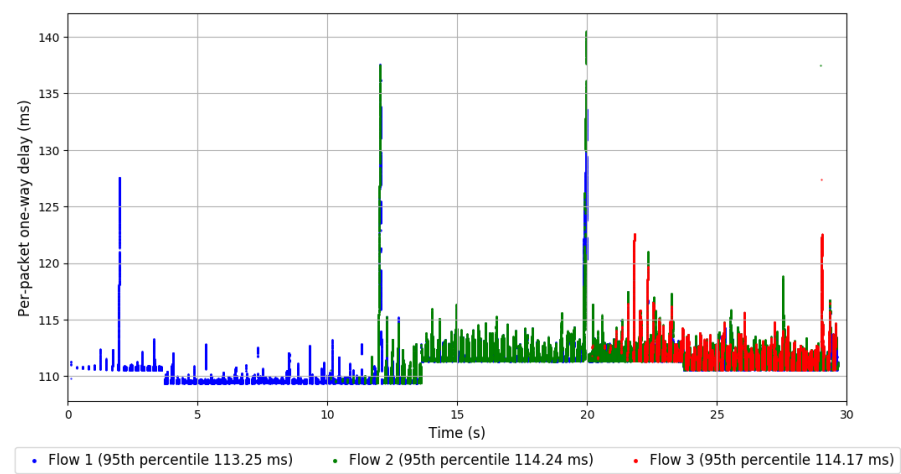
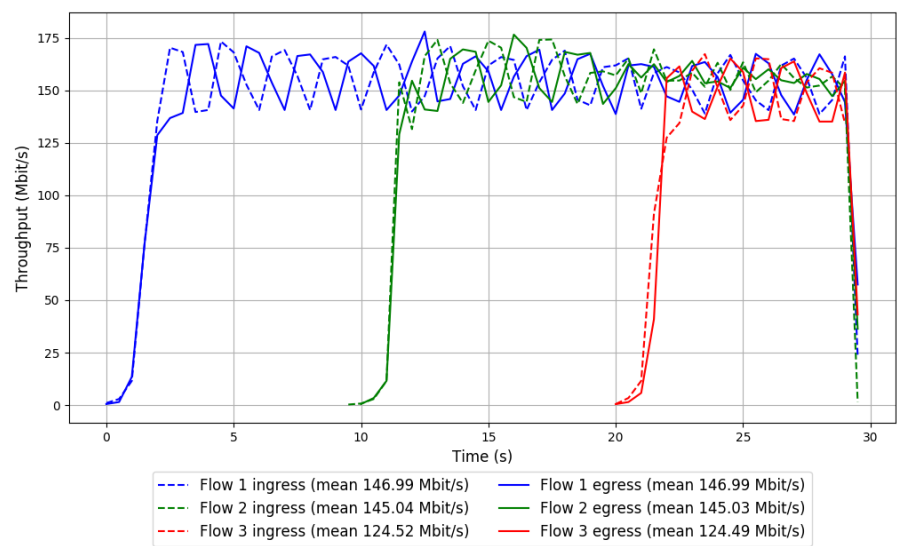
-- Flow 3:

Average throughput: 124.49 Mbit/s

95th percentile per-packet one-way delay: 114.167 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-28 14:43:14

End at: 2018-02-28 14:43:44

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.52 Mbit/s

95th percentile per-packet one-way delay: 113.943 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 148.01 Mbit/s

95th percentile per-packet one-way delay: 113.490 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.60 Mbit/s

95th percentile per-packet one-way delay: 114.329 ms

Loss rate: 0.00%

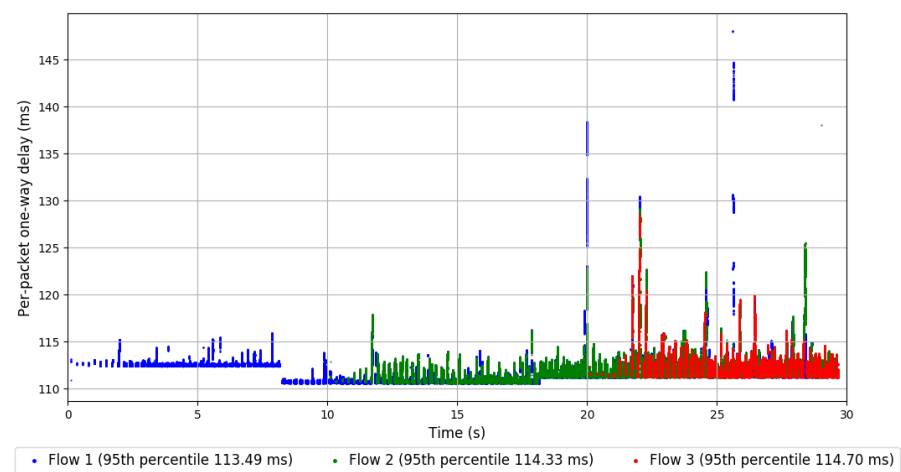
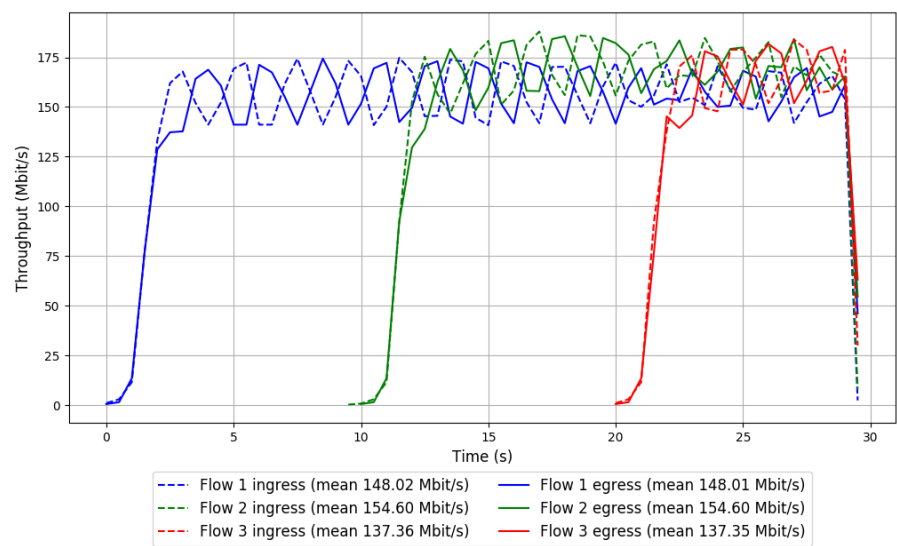
-- Flow 3:

Average throughput: 137.35 Mbit/s

95th percentile per-packet one-way delay: 114.698 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-28 15:02:45

End at: 2018-02-28 15:03:15

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.48 Mbit/s

95th percentile per-packet one-way delay: 117.125 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 147.26 Mbit/s

95th percentile per-packet one-way delay: 115.738 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 202.72 Mbit/s

95th percentile per-packet one-way delay: 120.884 ms

Loss rate: 0.00%

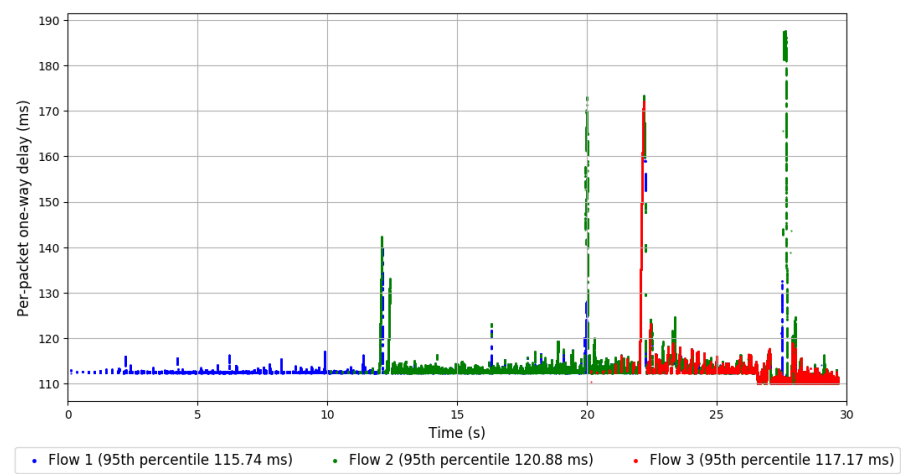
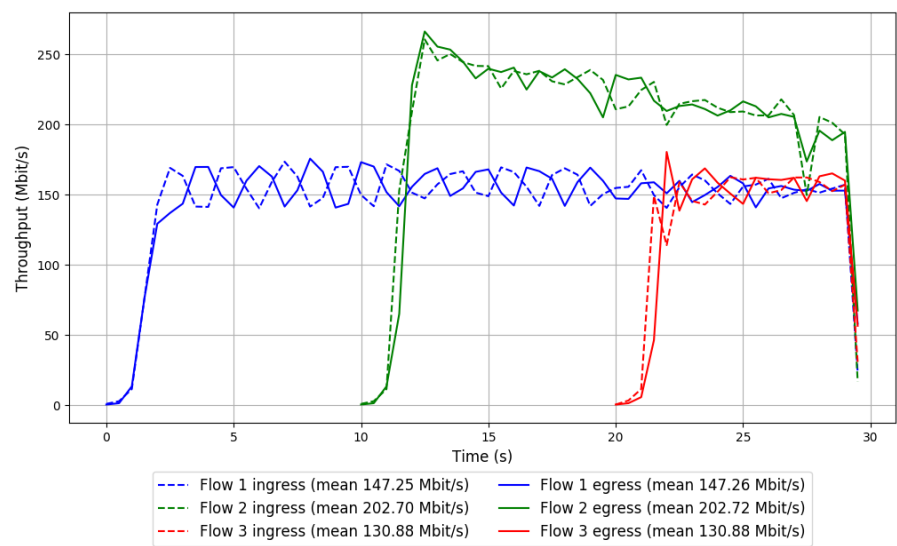
-- Flow 3:

Average throughput: 130.88 Mbit/s

95th percentile per-packet one-way delay: 117.165 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link

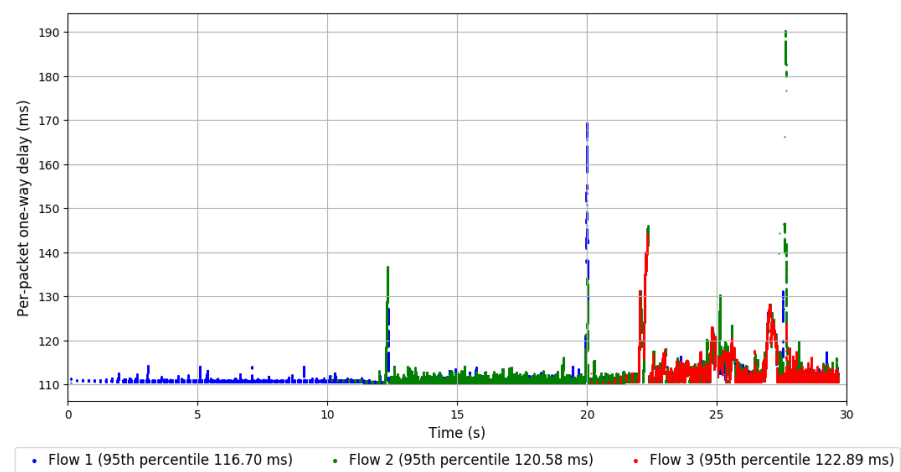
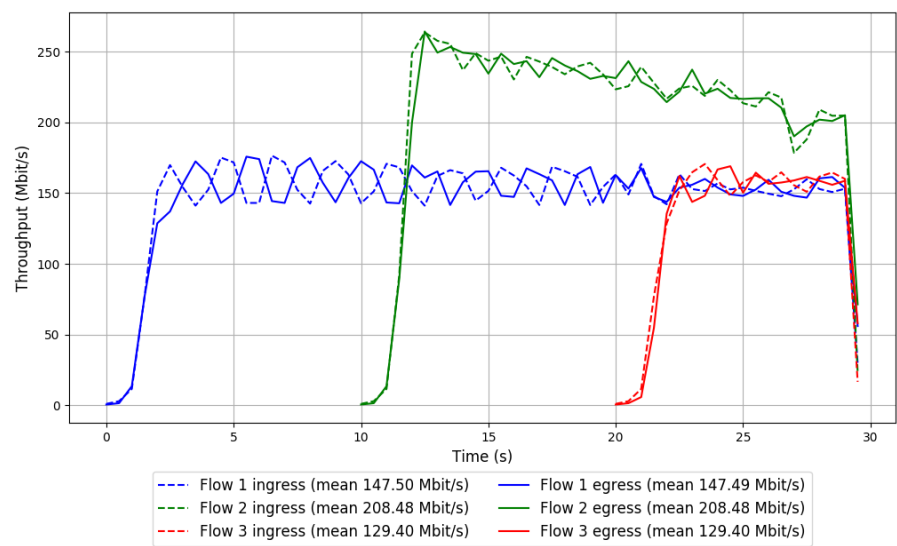


```
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-28 15:23:30
End at: 2018-02-28 15:24:00

# Below is generated by plot.py at 2018-02-28 19:18:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.93 Mbit/s
95th percentile per-packet one-way delay: 119.350 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 147.49 Mbit/s
95th percentile per-packet one-way delay: 116.697 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 208.48 Mbit/s
95th percentile per-packet one-way delay: 120.578 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 129.40 Mbit/s
95th percentile per-packet one-way delay: 122.887 ms
Loss rate: 0.00%
```

Run 10: Report of Indigo-1-32 — Data Link

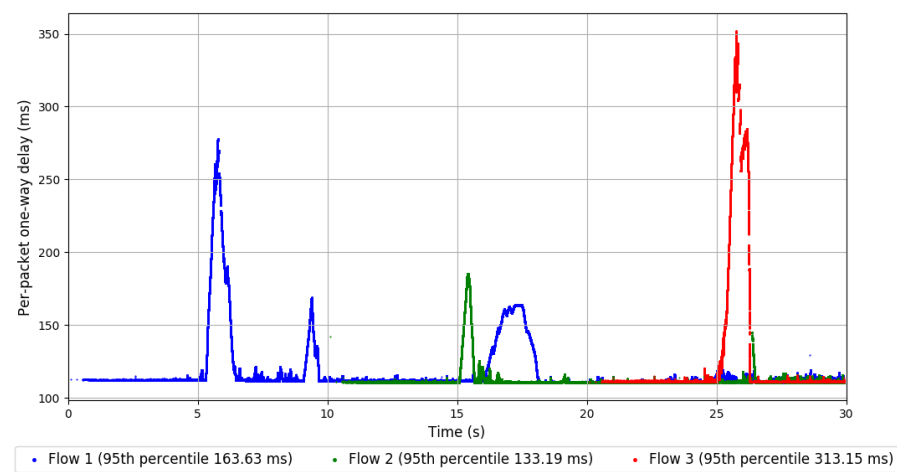
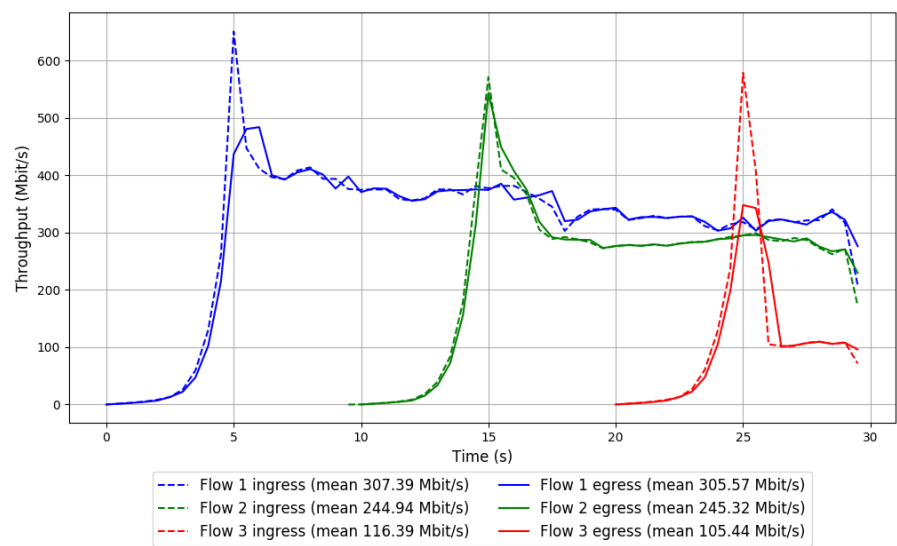


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-28 12:22:05
End at: 2018-02-28 12:22:35

# Below is generated by plot.py at 2018-02-28 19:18:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 503.31 Mbit/s
95th percentile per-packet one-way delay: 169.595 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 305.57 Mbit/s
95th percentile per-packet one-way delay: 163.630 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 245.32 Mbit/s
95th percentile per-packet one-way delay: 133.190 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 105.44 Mbit/s
95th percentile per-packet one-way delay: 313.147 ms
Loss rate: 9.40%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-28 12:41:32

End at: 2018-02-28 12:42:02

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 512.45 Mbit/s

95th percentile per-packet one-way delay: 117.105 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 354.92 Mbit/s

95th percentile per-packet one-way delay: 120.117 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 173.74 Mbit/s

95th percentile per-packet one-way delay: 112.471 ms

Loss rate: 0.00%

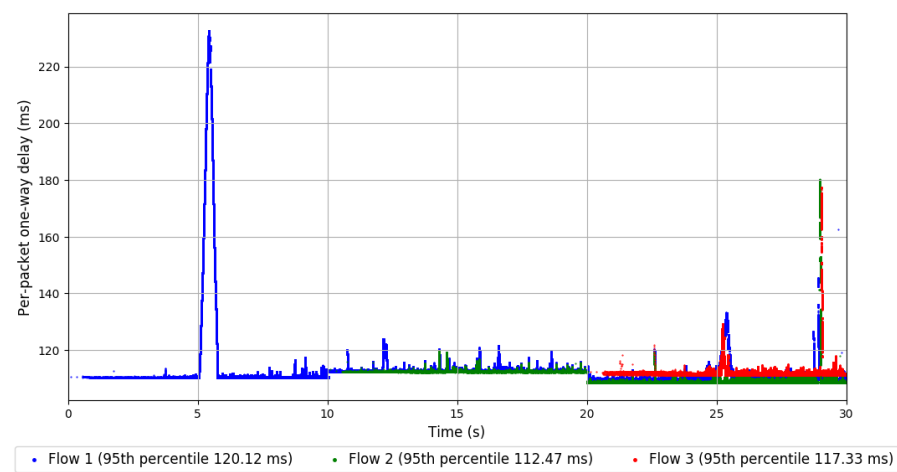
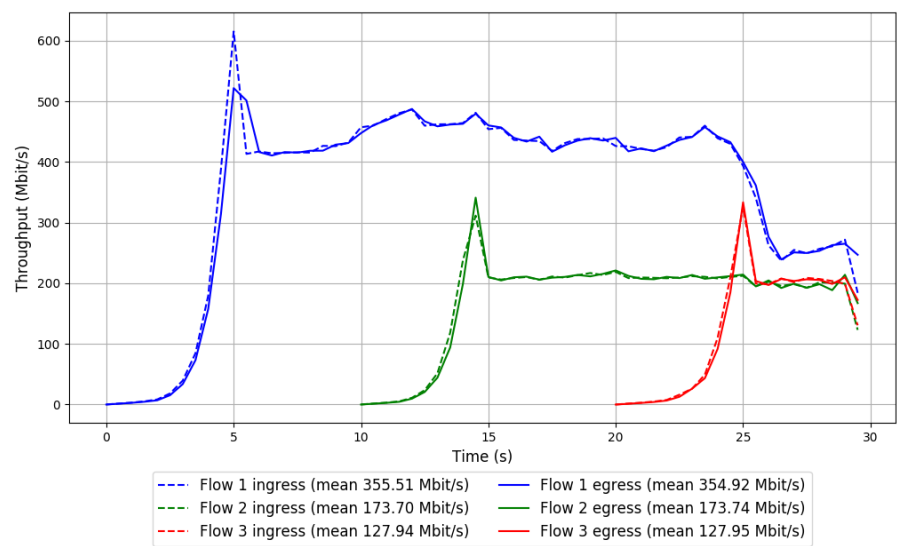
-- Flow 3:

Average throughput: 127.95 Mbit/s

95th percentile per-packet one-way delay: 117.331 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-28 13:01:20

End at: 2018-02-28 13:01:50

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 488.62 Mbit/s

95th percentile per-packet one-way delay: 173.148 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 312.43 Mbit/s

95th percentile per-packet one-way delay: 172.355 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 210.90 Mbit/s

95th percentile per-packet one-way delay: 144.604 ms

Loss rate: 0.01%

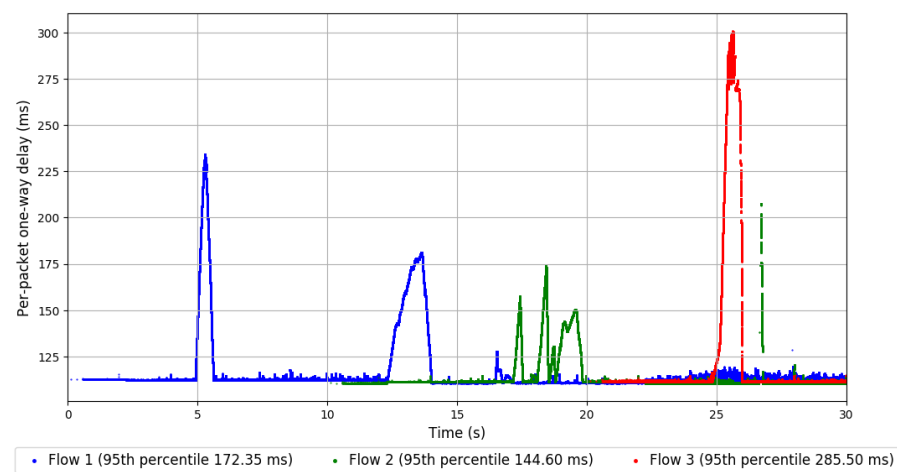
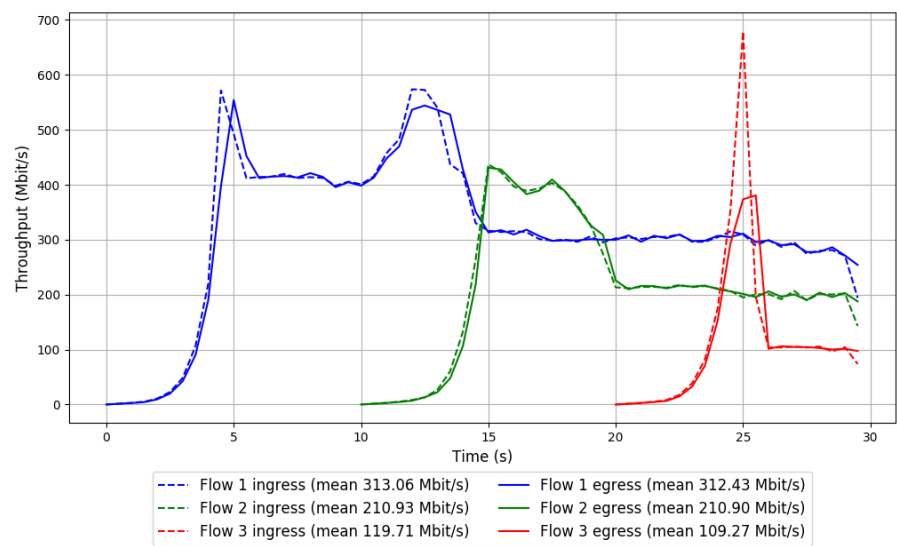
-- Flow 3:

Average throughput: 109.27 Mbit/s

95th percentile per-packet one-way delay: 285.497 ms

Loss rate: 8.72%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-28 13:21:07

End at: 2018-02-28 13:21:37

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 542.20 Mbit/s

95th percentile per-packet one-way delay: 116.481 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 307.58 Mbit/s

95th percentile per-packet one-way delay: 113.513 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 291.67 Mbit/s

95th percentile per-packet one-way delay: 121.457 ms

Loss rate: 0.01%

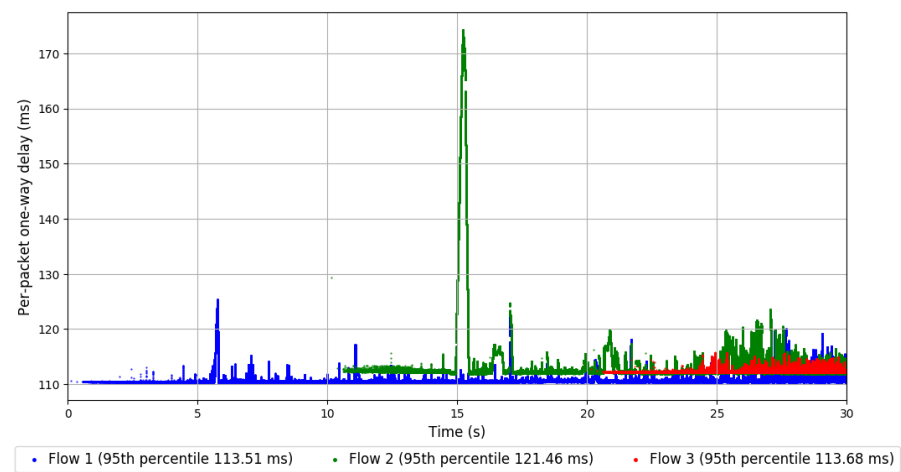
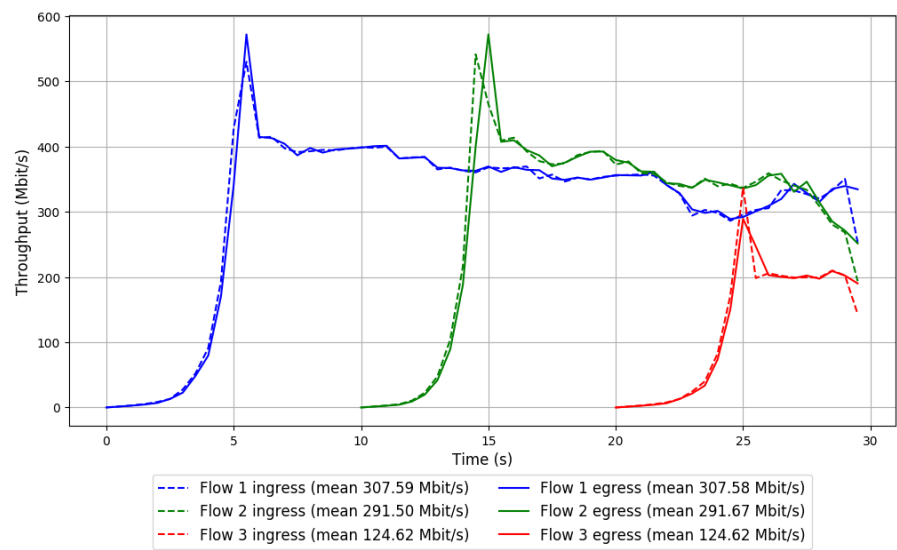
-- Flow 3:

Average throughput: 124.62 Mbit/s

95th percentile per-packet one-way delay: 113.684 ms

Loss rate: 0.02%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-28 13:40:54

End at: 2018-02-28 13:41:24

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 580.92 Mbit/s

95th percentile per-packet one-way delay: 138.384 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 318.12 Mbit/s

95th percentile per-packet one-way delay: 130.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 287.82 Mbit/s

95th percentile per-packet one-way delay: 144.156 ms

Loss rate: 0.00%

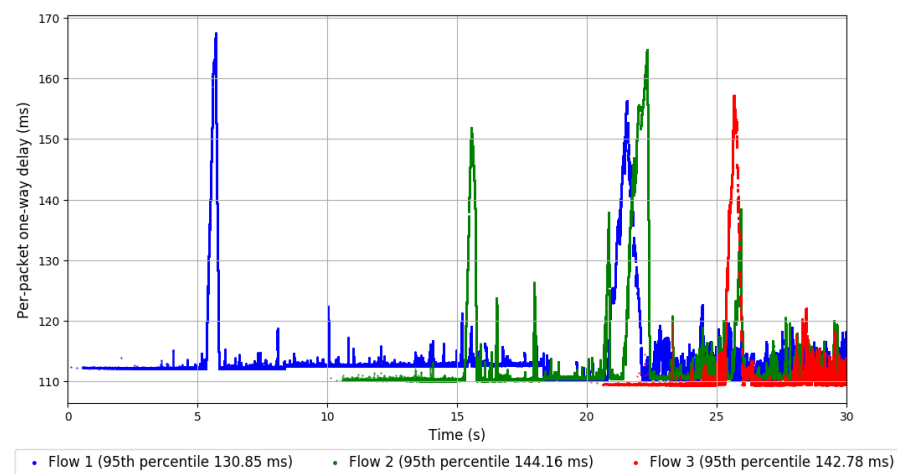
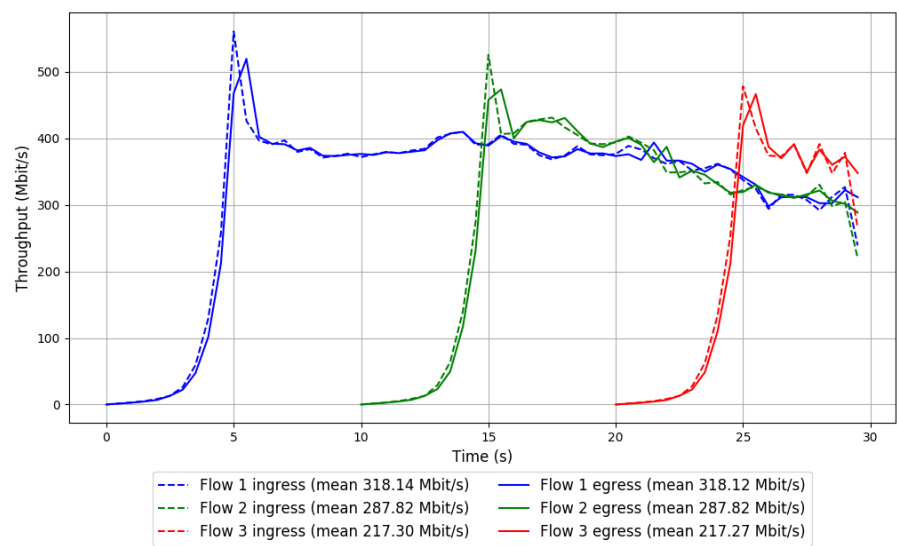
-- Flow 3:

Average throughput: 217.27 Mbit/s

95th percentile per-packet one-way delay: 142.781 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-28 14:00:56

End at: 2018-02-28 14:01:26

Below is generated by plot.py at 2018-02-28 19:18:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 490.97 Mbit/s

95th percentile per-packet one-way delay: 165.450 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 264.97 Mbit/s

95th percentile per-packet one-way delay: 187.304 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 276.86 Mbit/s

95th percentile per-packet one-way delay: 150.907 ms

Loss rate: 0.00%

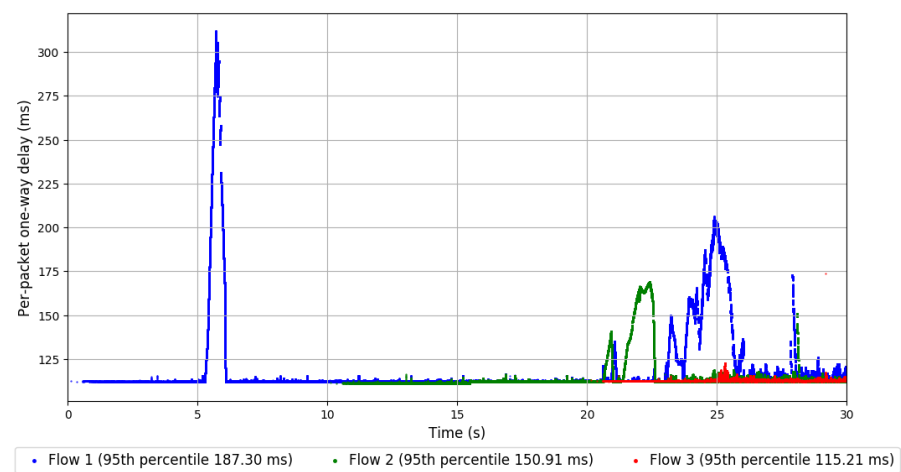
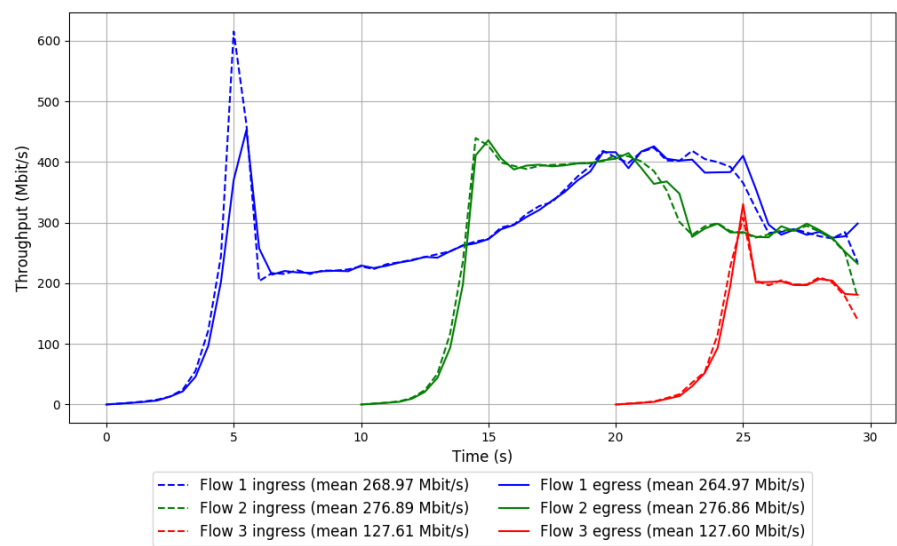
-- Flow 3:

Average throughput: 127.60 Mbit/s

95th percentile per-packet one-way delay: 115.209 ms

Loss rate: 0.02%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-28 14:20:49

End at: 2018-02-28 14:21:19

Below is generated by plot.py at 2018-02-28 19:19:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 545.28 Mbit/s

95th percentile per-packet one-way delay: 124.197 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 309.64 Mbit/s

95th percentile per-packet one-way delay: 136.629 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 287.04 Mbit/s

95th percentile per-packet one-way delay: 117.710 ms

Loss rate: 0.00%

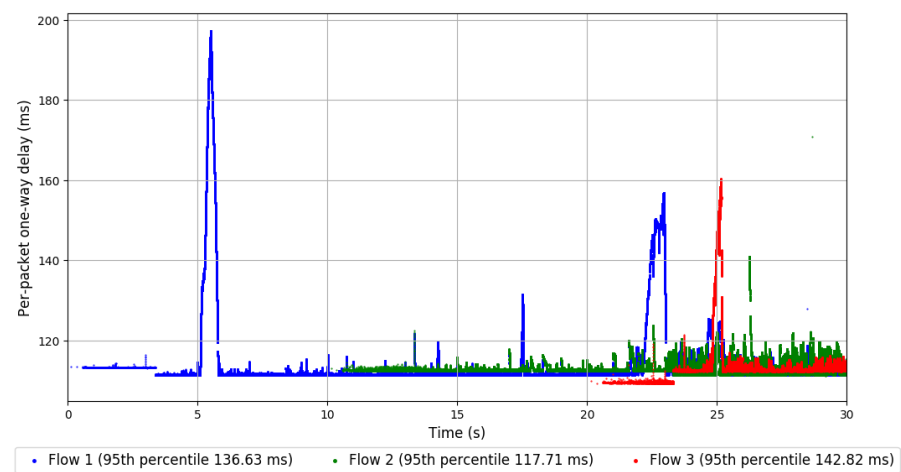
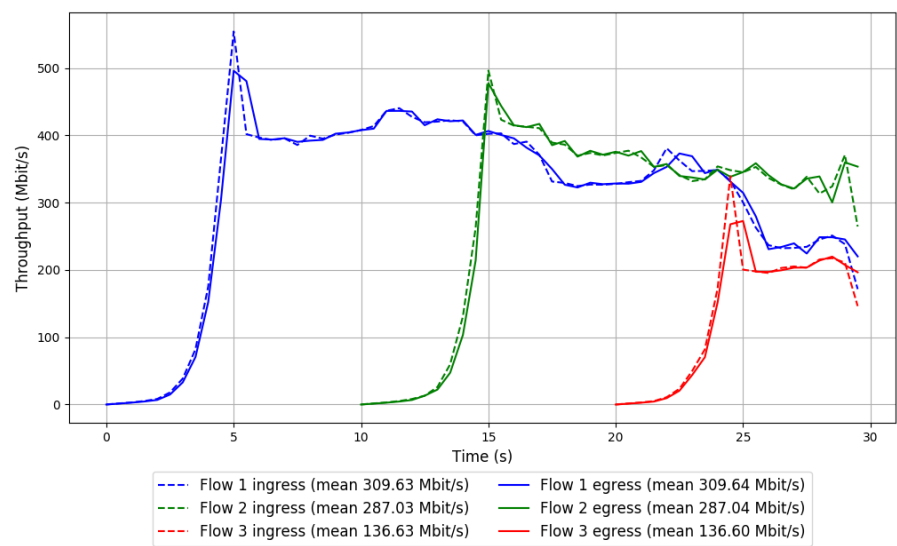
-- Flow 3:

Average throughput: 136.60 Mbit/s

95th percentile per-packet one-way delay: 142.819 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-28 14:40:42

End at: 2018-02-28 14:41:12

Below is generated by plot.py at 2018-02-28 19:20:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 563.63 Mbit/s

95th percentile per-packet one-way delay: 136.752 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 323.97 Mbit/s

95th percentile per-packet one-way delay: 122.877 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 323.69 Mbit/s

95th percentile per-packet one-way delay: 147.906 ms

Loss rate: 0.01%

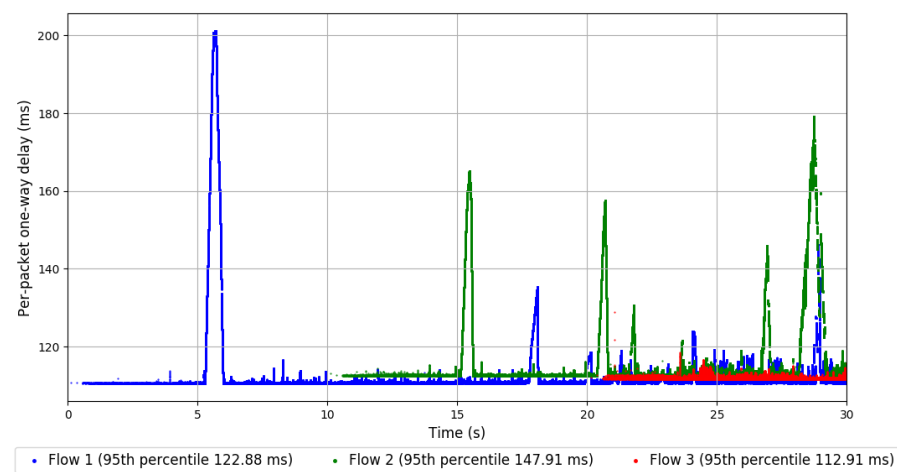
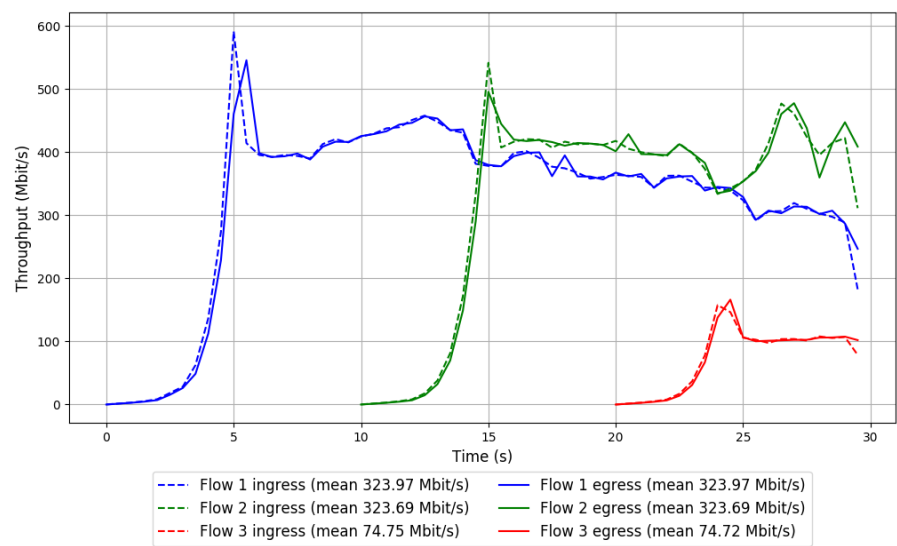
-- Flow 3:

Average throughput: 74.72 Mbit/s

95th percentile per-packet one-way delay: 112.907 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-28 15:00:08

End at: 2018-02-28 15:00:38

Below is generated by plot.py at 2018-02-28 19:20:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 550.72 Mbit/s

95th percentile per-packet one-way delay: 156.700 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 318.74 Mbit/s

95th percentile per-packet one-way delay: 185.655 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 278.52 Mbit/s

95th percentile per-packet one-way delay: 115.015 ms

Loss rate: 0.00%

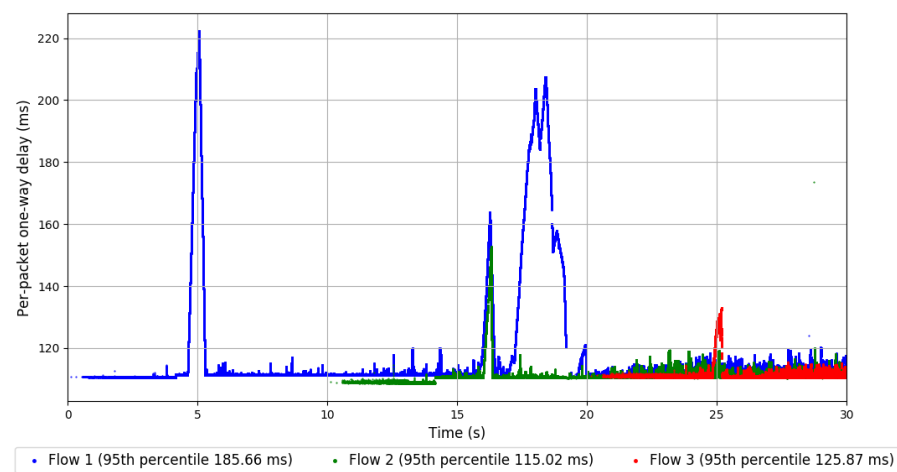
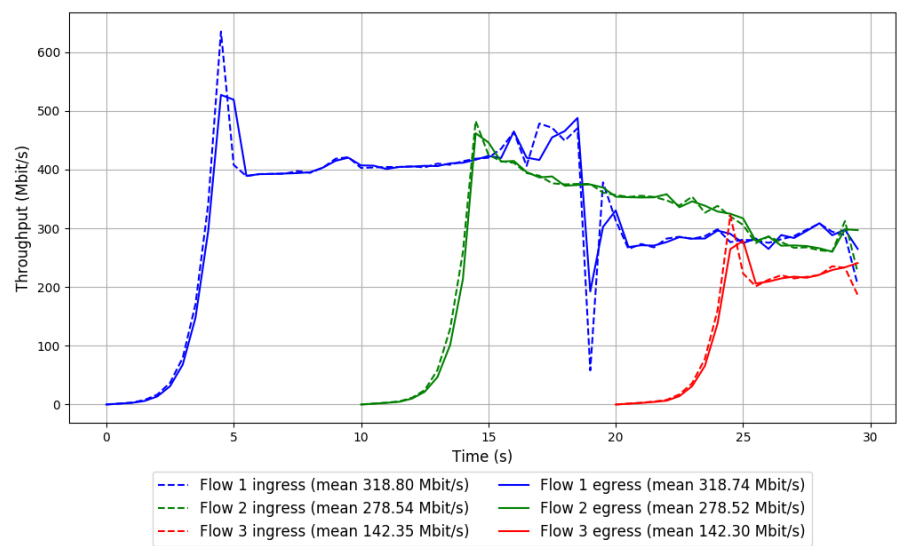
-- Flow 3:

Average throughput: 142.30 Mbit/s

95th percentile per-packet one-way delay: 125.869 ms

Loss rate: 0.02%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-28 15:20:56

End at: 2018-02-28 15:21:26

Below is generated by plot.py at 2018-02-28 19:21:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 501.41 Mbit/s

95th percentile per-packet one-way delay: 177.542 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 297.60 Mbit/s

95th percentile per-packet one-way delay: 201.372 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 242.30 Mbit/s

95th percentile per-packet one-way delay: 119.220 ms

Loss rate: 0.01%

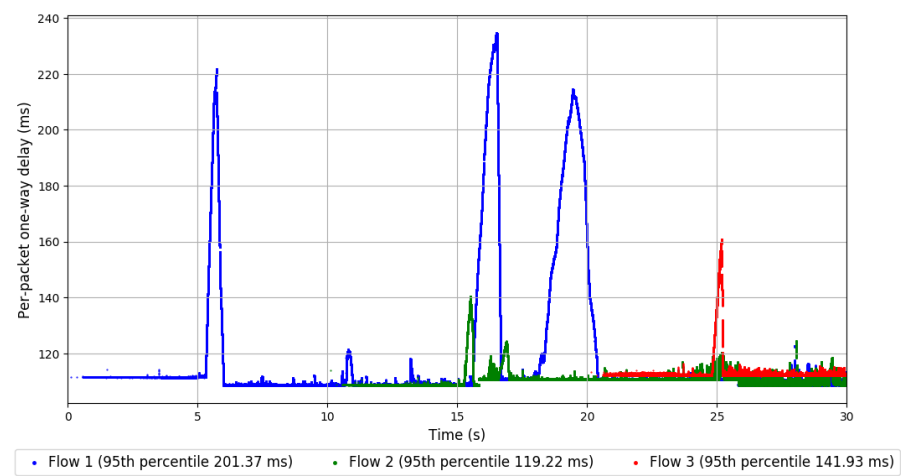
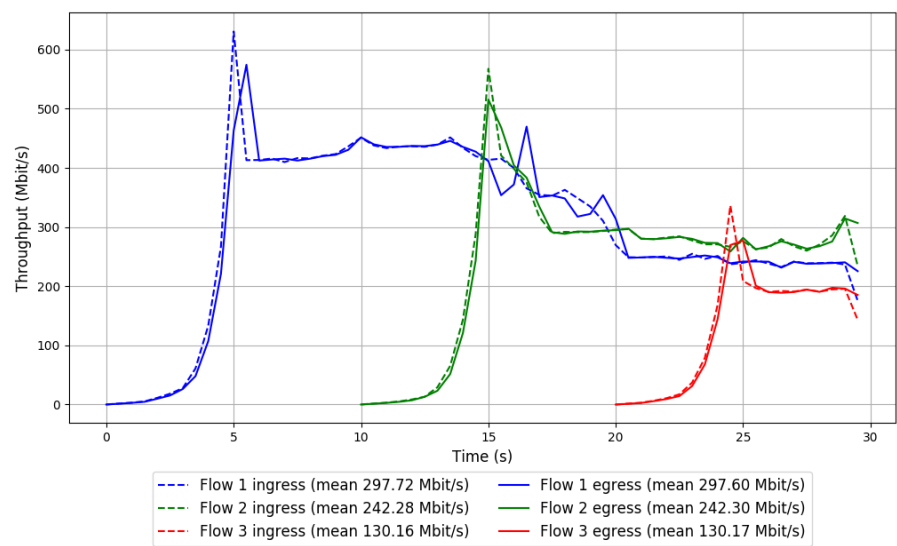
-- Flow 3:

Average throughput: 130.17 Mbit/s

95th percentile per-packet one-way delay: 141.933 ms

Loss rate: 0.02%

Run 10: Report of Vivace-latency — Data Link

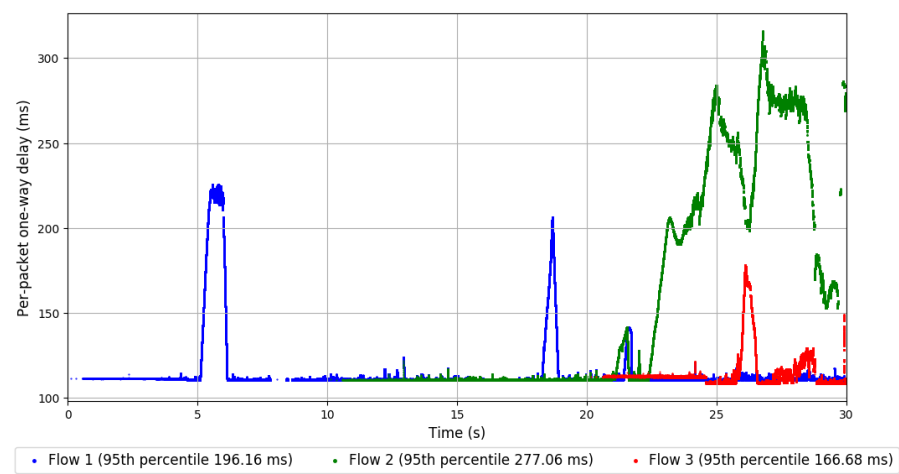
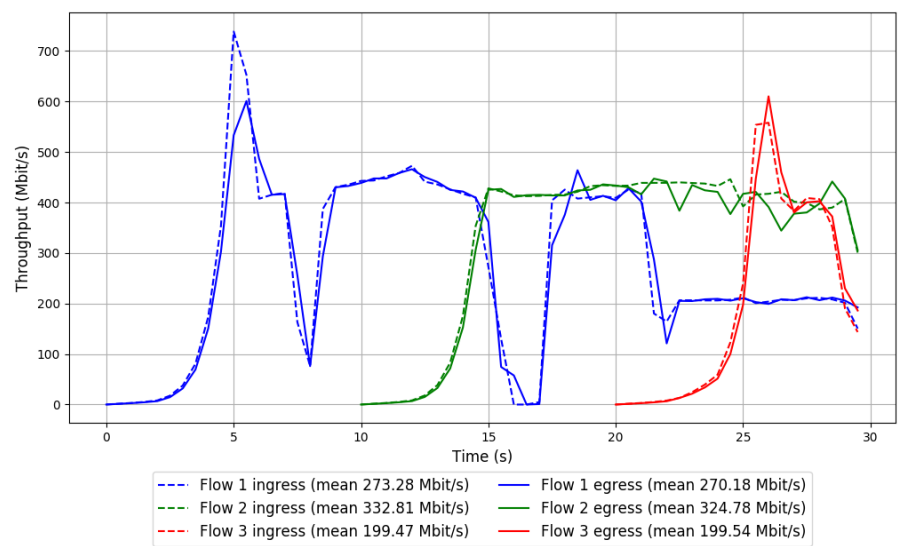


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-28 12:35:37
End at: 2018-02-28 12:36:07

# Below is generated by plot.py at 2018-02-28 19:25:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 551.56 Mbit/s
95th percentile per-packet one-way delay: 268.968 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 270.18 Mbit/s
95th percentile per-packet one-way delay: 196.158 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 324.78 Mbit/s
95th percentile per-packet one-way delay: 277.063 ms
Loss rate: 2.36%
-- Flow 3:
Average throughput: 199.54 Mbit/s
95th percentile per-packet one-way delay: 166.676 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-28 12:55:04

End at: 2018-02-28 12:55:34

Below is generated by plot.py at 2018-02-28 19:27:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 571.10 Mbit/s

95th percentile per-packet one-way delay: 276.174 ms

Loss rate: 2.02%

-- Flow 1:

Average throughput: 332.98 Mbit/s

95th percentile per-packet one-way delay: 242.486 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 304.66 Mbit/s

95th percentile per-packet one-way delay: 278.126 ms

Loss rate: 2.83%

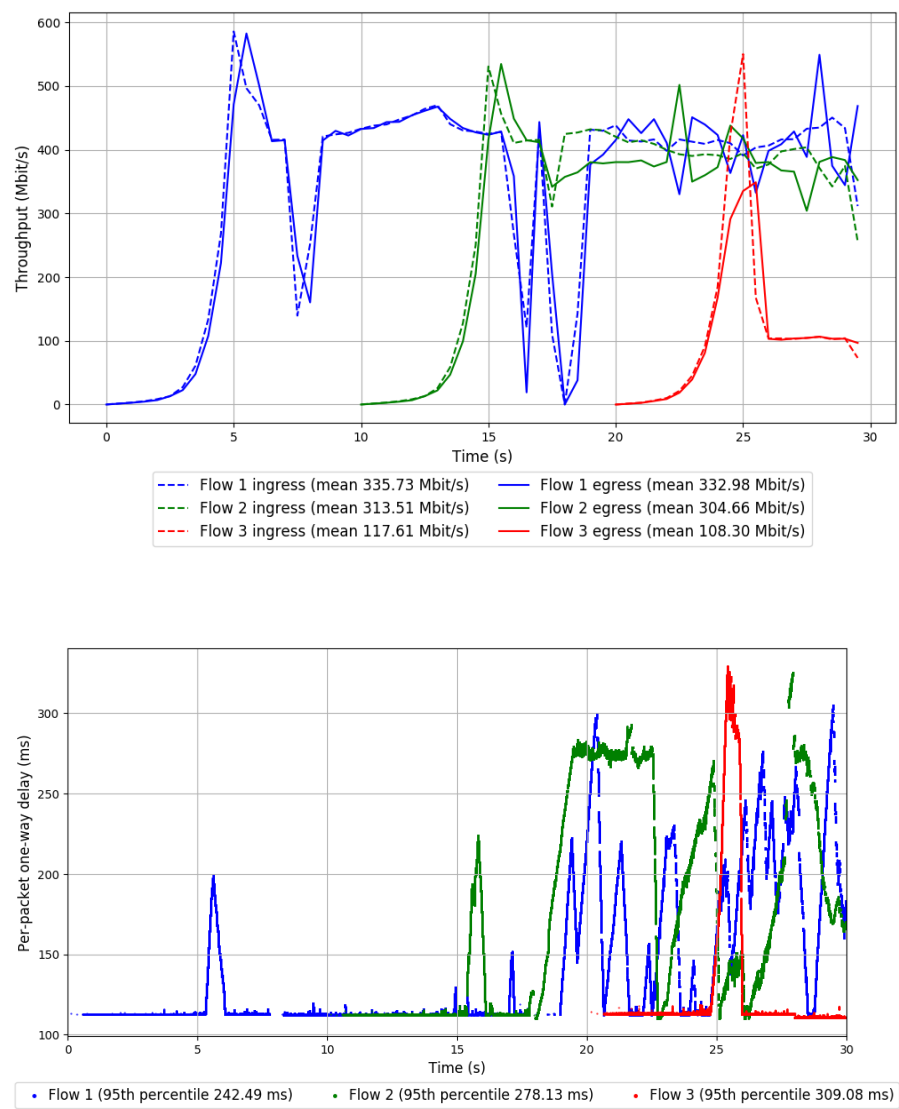
-- Flow 3:

Average throughput: 108.30 Mbit/s

95th percentile per-packet one-way delay: 309.077 ms

Loss rate: 7.95%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-28 13:14:59

End at: 2018-02-28 13:15:29

Below is generated by plot.py at 2018-02-28 19:27:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 400.85 Mbit/s

95th percentile per-packet one-way delay: 259.483 ms

Loss rate: 2.73%

-- Flow 1:

Average throughput: 189.20 Mbit/s

95th percentile per-packet one-way delay: 238.338 ms

Loss rate: 3.53%

-- Flow 2:

Average throughput: 243.59 Mbit/s

95th percentile per-packet one-way delay: 264.869 ms

Loss rate: 1.99%

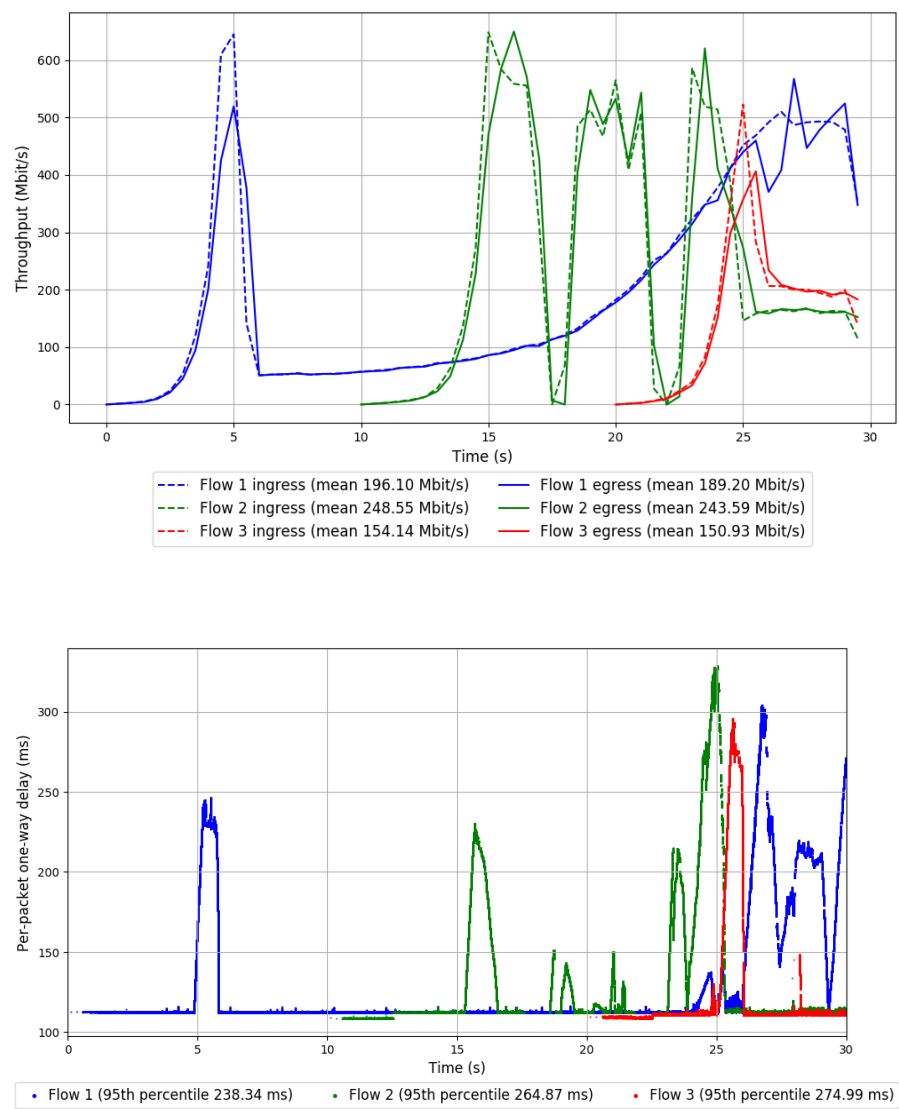
-- Flow 3:

Average throughput: 150.93 Mbit/s

95th percentile per-packet one-way delay: 274.994 ms

Loss rate: 2.07%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-28 13:34:43

End at: 2018-02-28 13:35:13

Below is generated by plot.py at 2018-02-28 19:27:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 531.81 Mbit/s

95th percentile per-packet one-way delay: 297.573 ms

Loss rate: 5.45%

-- Flow 1:

Average throughput: 313.13 Mbit/s

95th percentile per-packet one-way delay: 273.687 ms

Loss rate: 4.74%

-- Flow 2:

Average throughput: 268.23 Mbit/s

95th percentile per-packet one-way delay: 308.660 ms

Loss rate: 2.93%

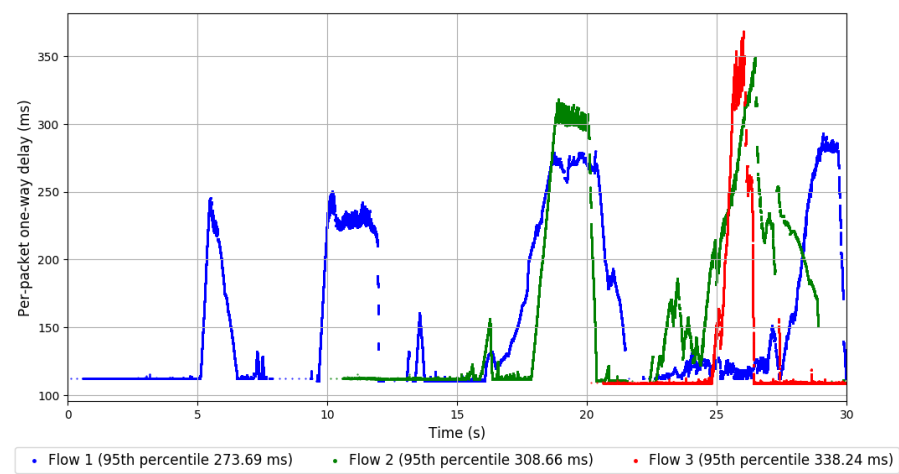
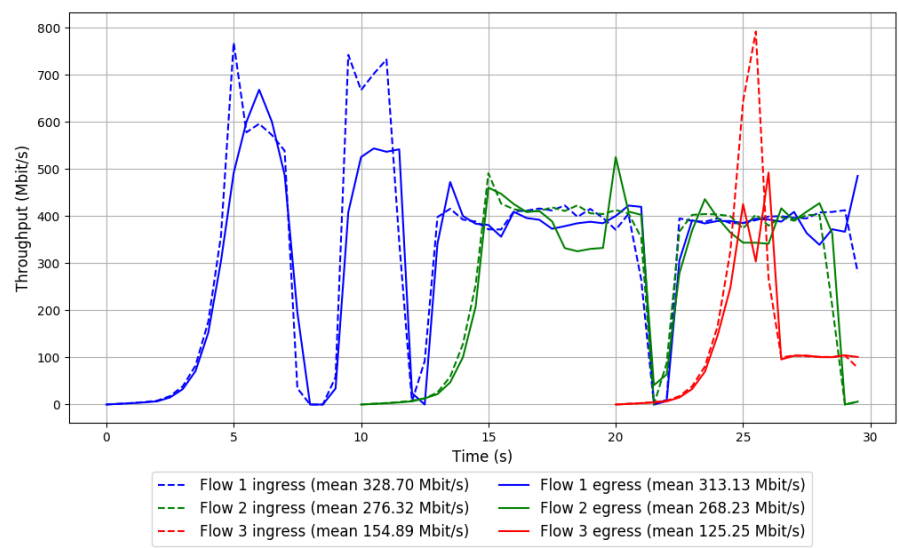
-- Flow 3:

Average throughput: 125.25 Mbit/s

95th percentile per-packet one-way delay: 338.238 ms

Loss rate: 19.14%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-28 13:54:37

End at: 2018-02-28 13:55:07

Below is generated by plot.py at 2018-02-28 19:28:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 545.99 Mbit/s

95th percentile per-packet one-way delay: 288.042 ms

Loss rate: 2.69%

-- Flow 1:

Average throughput: 266.68 Mbit/s

95th percentile per-packet one-way delay: 260.582 ms

Loss rate: 1.79%

-- Flow 2:

Average throughput: 311.60 Mbit/s

95th percentile per-packet one-way delay: 301.070 ms

Loss rate: 4.31%

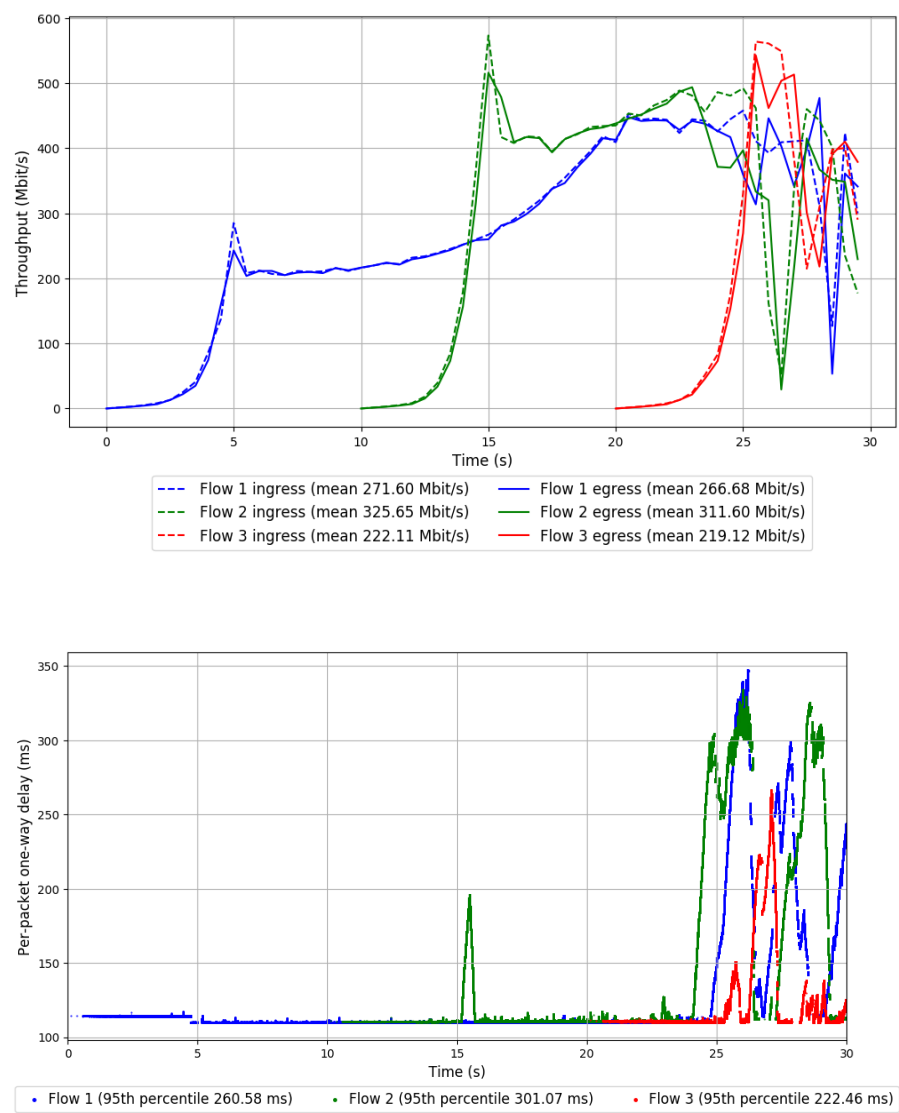
-- Flow 3:

Average throughput: 219.12 Mbit/s

95th percentile per-packet one-way delay: 222.456 ms

Loss rate: 1.26%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-28 14:14:27

End at: 2018-02-28 14:14:57

Below is generated by plot.py at 2018-02-28 19:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 636.32 Mbit/s

95th percentile per-packet one-way delay: 262.306 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 341.93 Mbit/s

95th percentile per-packet one-way delay: 259.415 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 329.45 Mbit/s

95th percentile per-packet one-way delay: 261.401 ms

Loss rate: 1.50%

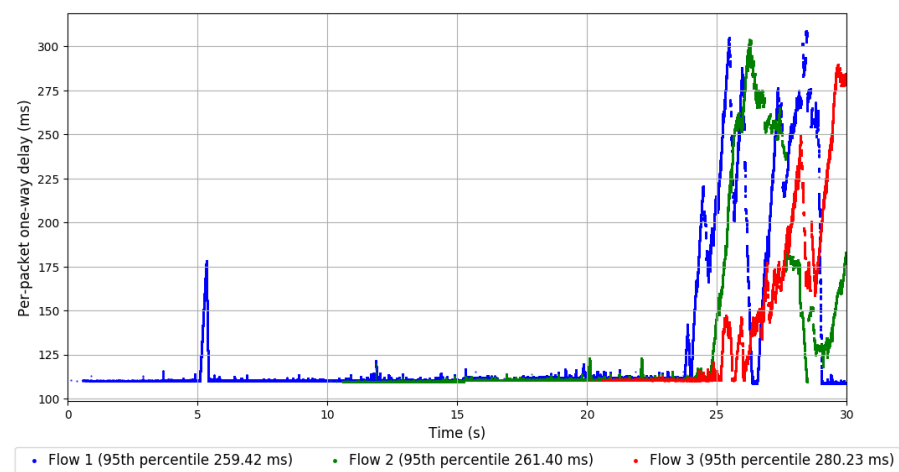
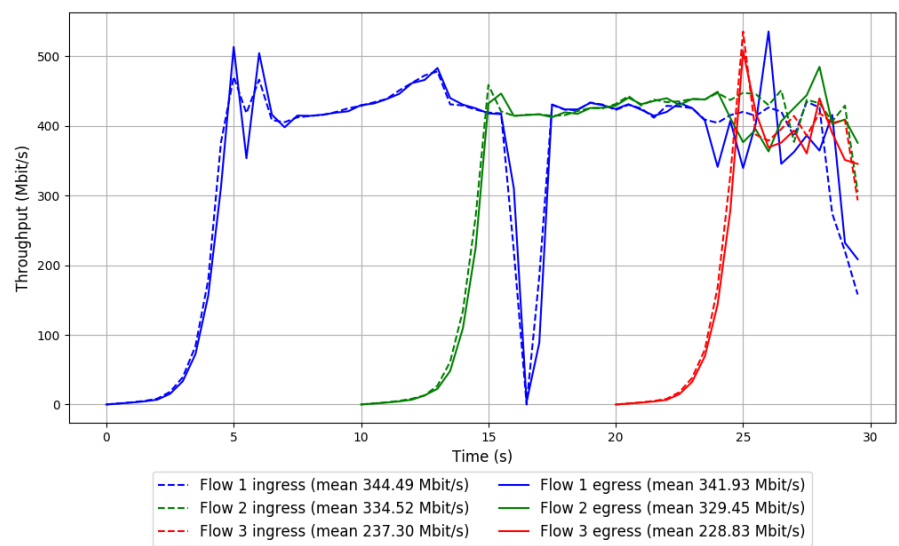
-- Flow 3:

Average throughput: 228.83 Mbit/s

95th percentile per-packet one-way delay: 280.231 ms

Loss rate: 3.56%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-28 14:34:26

End at: 2018-02-28 14:34:56

Below is generated by plot.py at 2018-02-28 19:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 504.75 Mbit/s

95th percentile per-packet one-way delay: 204.052 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 279.43 Mbit/s

95th percentile per-packet one-way delay: 201.003 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 288.77 Mbit/s

95th percentile per-packet one-way delay: 158.217 ms

Loss rate: 0.00%

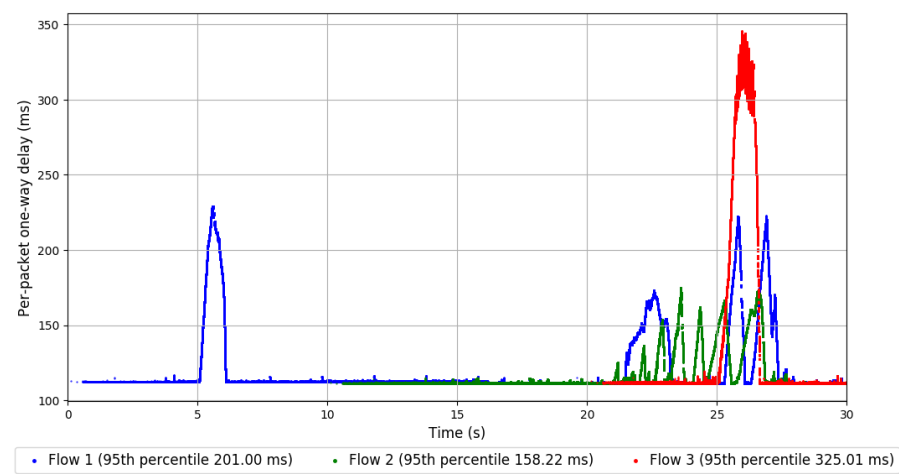
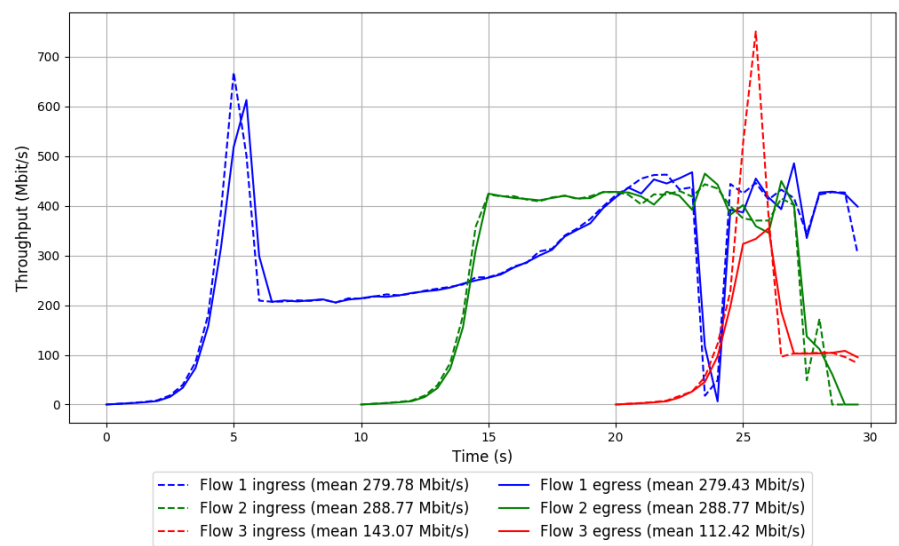
-- Flow 3:

Average throughput: 112.42 Mbit/s

95th percentile per-packet one-way delay: 325.014 ms

Loss rate: 21.43%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-28 14:54:14

End at: 2018-02-28 14:54:44

Below is generated by plot.py at 2018-02-28 19:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 561.43 Mbit/s

95th percentile per-packet one-way delay: 237.973 ms

Loss rate: 3.12%

-- Flow 1:

Average throughput: 301.05 Mbit/s

95th percentile per-packet one-way delay: 239.760 ms

Loss rate: 4.32%

-- Flow 2:

Average throughput: 281.95 Mbit/s

95th percentile per-packet one-way delay: 208.320 ms

Loss rate: 0.87%

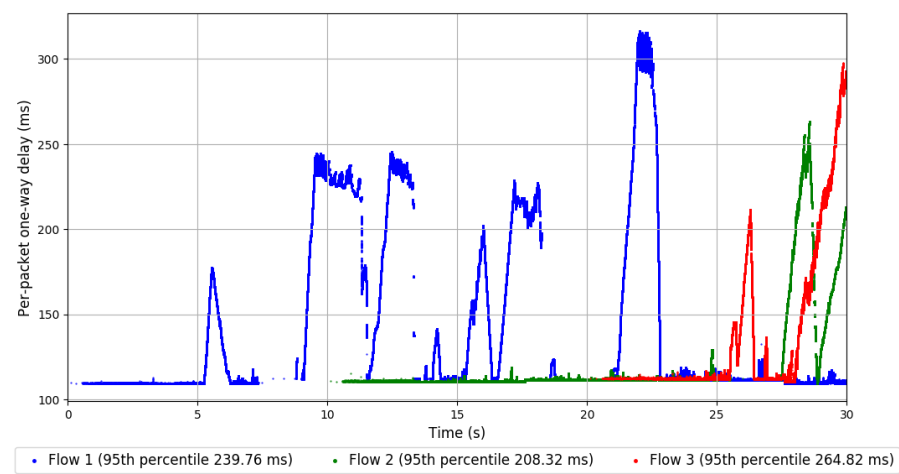
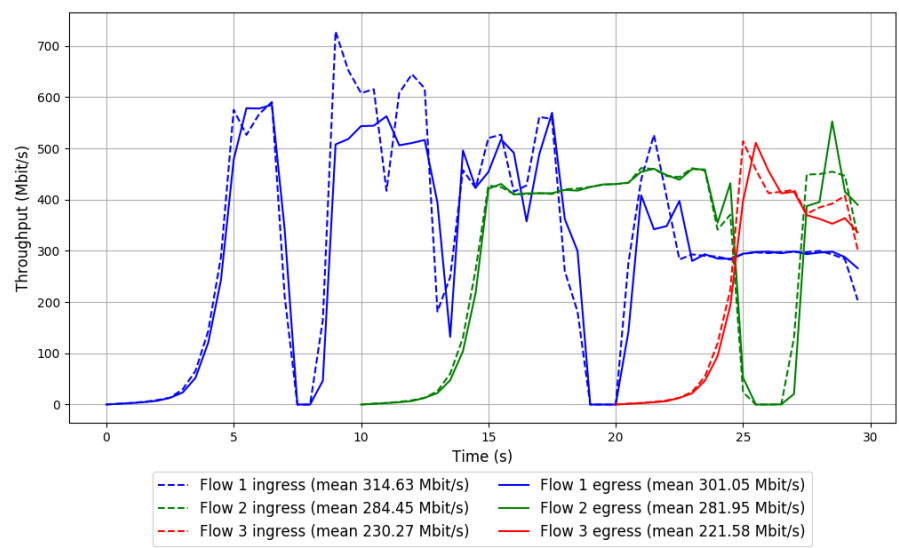
-- Flow 3:

Average throughput: 221.58 Mbit/s

95th percentile per-packet one-way delay: 264.818 ms

Loss rate: 3.77%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-28 15:14:31

End at: 2018-02-28 15:15:01

Below is generated by plot.py at 2018-02-28 19:35:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 603.66 Mbit/s

95th percentile per-packet one-way delay: 262.904 ms

Loss rate: 2.83%

-- Flow 1:

Average throughput: 319.01 Mbit/s

95th percentile per-packet one-way delay: 279.714 ms

Loss rate: 3.44%

-- Flow 2:

Average throughput: 326.66 Mbit/s

95th percentile per-packet one-way delay: 253.393 ms

Loss rate: 2.70%

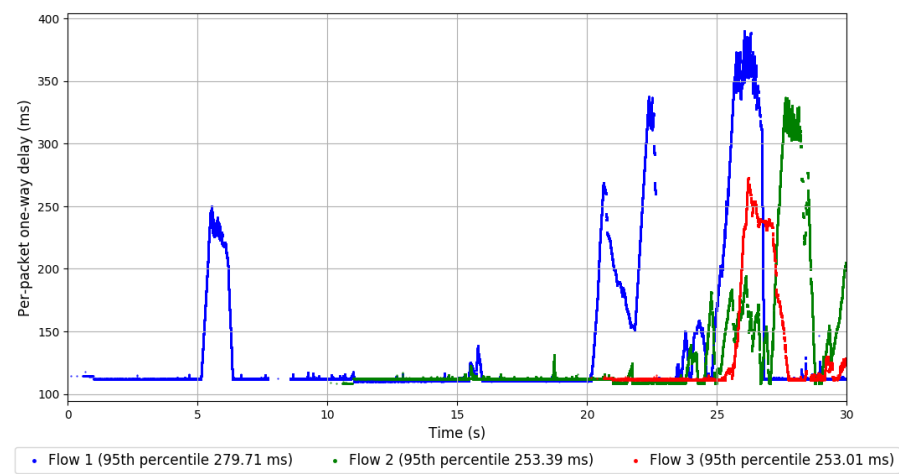
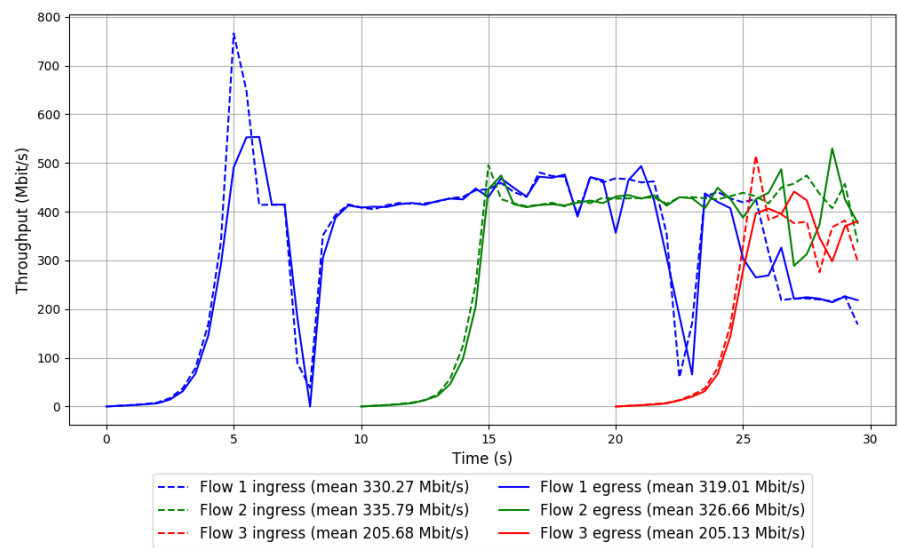
-- Flow 3:

Average throughput: 205.13 Mbit/s

95th percentile per-packet one-way delay: 253.008 ms

Loss rate: 0.28%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-28 15:34:31

End at: 2018-02-28 15:35:01

Below is generated by plot.py at 2018-02-28 19:35:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 445.23 Mbit/s

95th percentile per-packet one-way delay: 297.884 ms

Loss rate: 4.78%

-- Flow 1:

Average throughput: 245.13 Mbit/s

95th percentile per-packet one-way delay: 311.178 ms

Loss rate: 6.80%

-- Flow 2:

Average throughput: 190.30 Mbit/s

95th percentile per-packet one-way delay: 151.130 ms

Loss rate: 0.00%

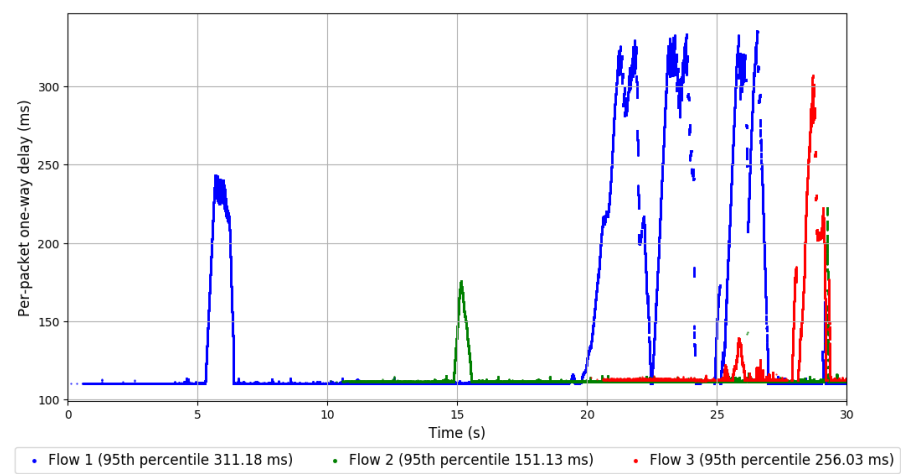
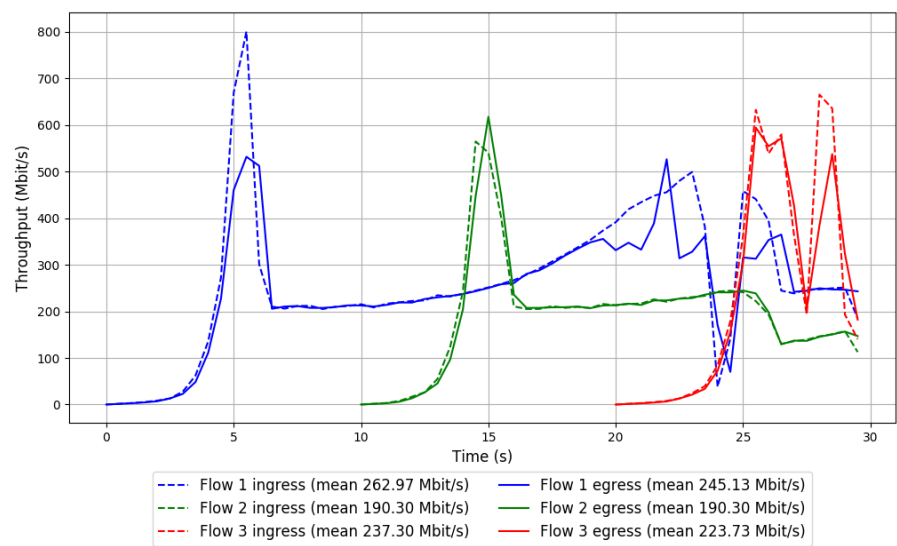
-- Flow 3:

Average throughput: 223.73 Mbit/s

95th percentile per-packet one-way delay: 256.031 ms

Loss rate: 5.73%

Run 10: Report of Vivace-loss — Data Link

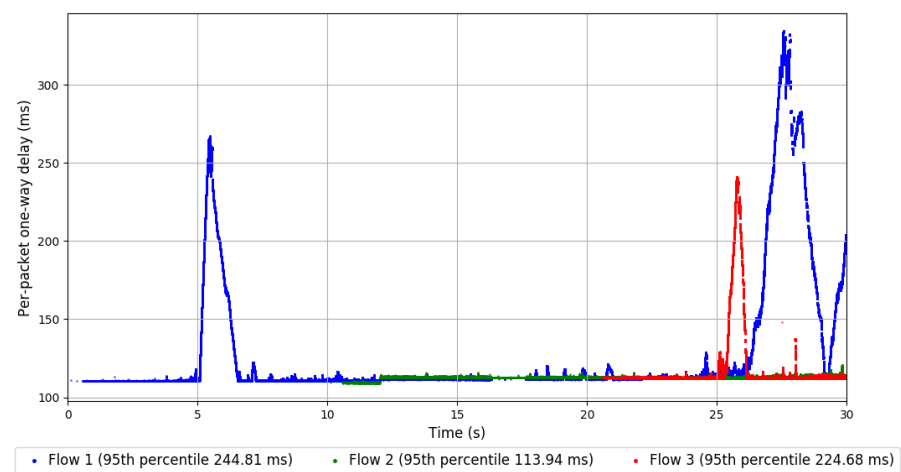
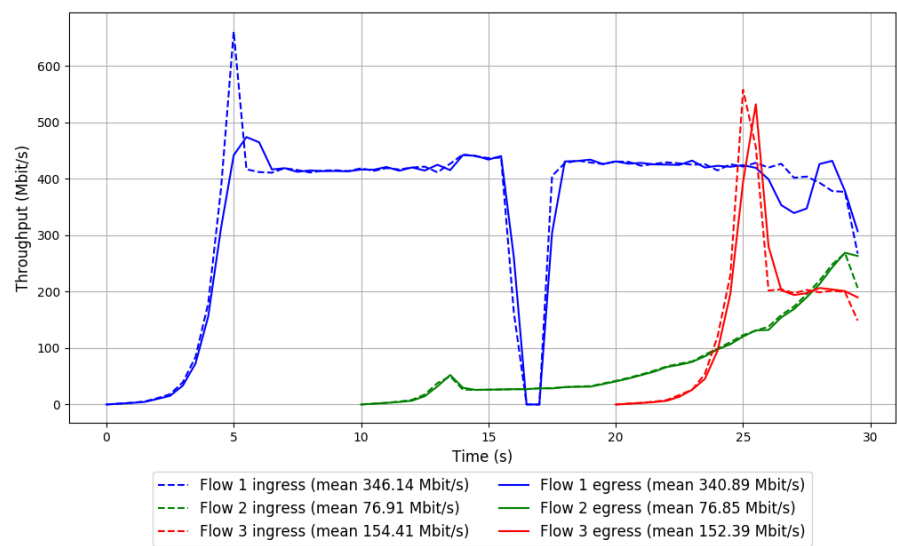


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-28 12:29:40
End at: 2018-02-28 12:30:10

# Below is generated by plot.py at 2018-02-28 19:35:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.09 Mbit/s
95th percentile per-packet one-way delay: 231.527 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 340.89 Mbit/s
95th percentile per-packet one-way delay: 244.809 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 76.85 Mbit/s
95th percentile per-packet one-way delay: 113.938 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 152.39 Mbit/s
95th percentile per-packet one-way delay: 224.681 ms
Loss rate: 1.36%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-28 12:49:00

End at: 2018-02-28 12:49:30

Below is generated by plot.py at 2018-02-28 19:37:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.02 Mbit/s

95th percentile per-packet one-way delay: 266.592 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 351.62 Mbit/s

95th percentile per-packet one-way delay: 291.680 ms

Loss rate: 2.07%

-- Flow 2:

Average throughput: 204.26 Mbit/s

95th percentile per-packet one-way delay: 115.888 ms

Loss rate: 0.02%

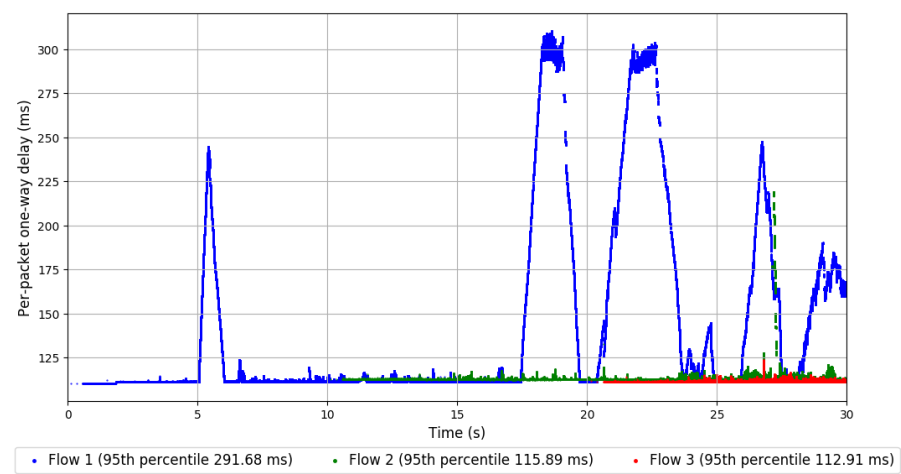
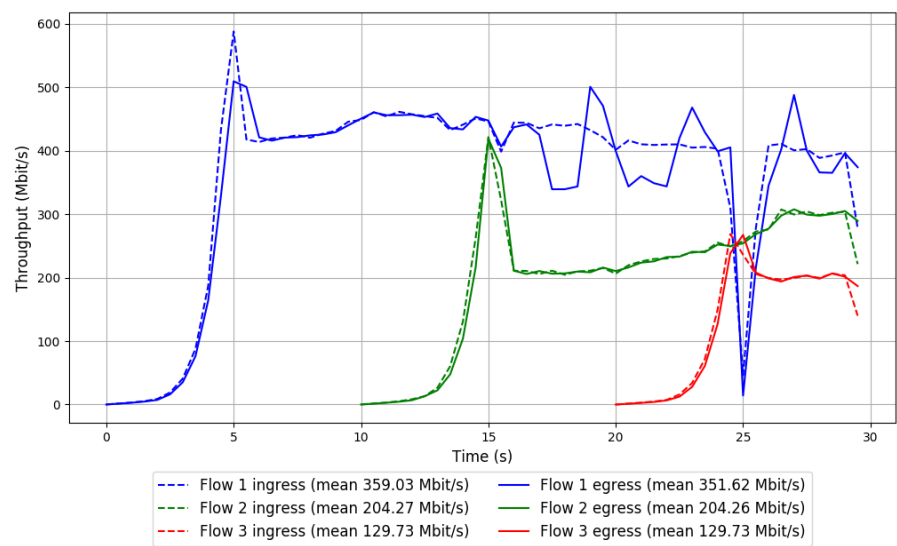
-- Flow 3:

Average throughput: 129.73 Mbit/s

95th percentile per-packet one-way delay: 112.907 ms

Loss rate: 0.02%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-28 13:08:55

End at: 2018-02-28 13:09:25

Below is generated by plot.py at 2018-02-28 19:39:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 619.56 Mbit/s

95th percentile per-packet one-way delay: 259.533 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 347.07 Mbit/s

95th percentile per-packet one-way delay: 219.206 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 303.06 Mbit/s

95th percentile per-packet one-way delay: 280.323 ms

Loss rate: 2.07%

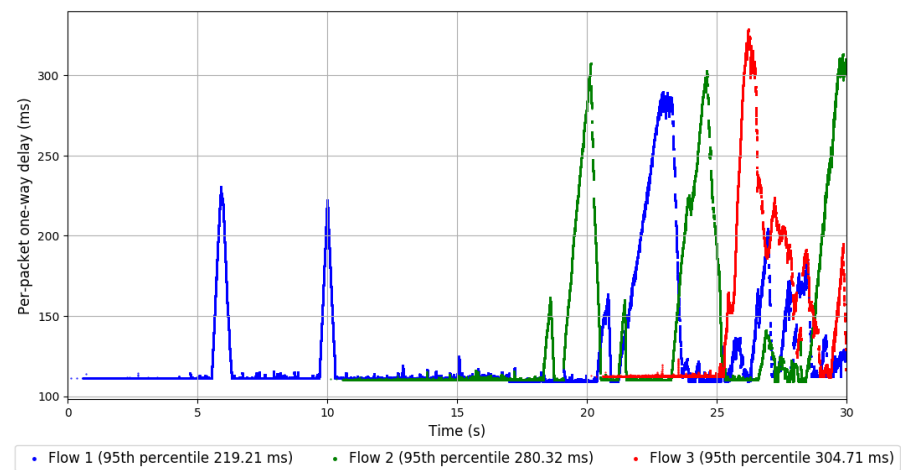
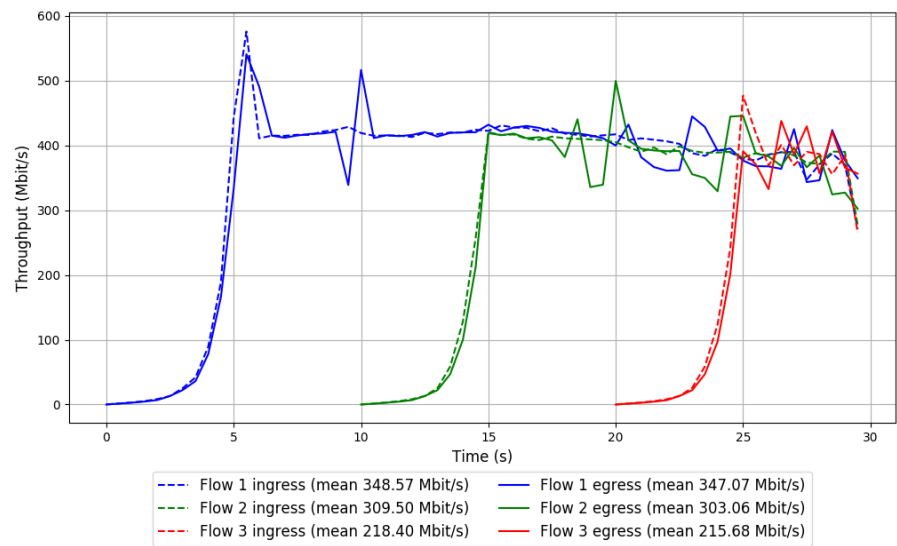
-- Flow 3:

Average throughput: 215.68 Mbit/s

95th percentile per-packet one-way delay: 304.710 ms

Loss rate: 1.26%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-28 13:28:35

End at: 2018-02-28 13:29:05

Below is generated by plot.py at 2018-02-28 19:39:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 580.86 Mbit/s

95th percentile per-packet one-way delay: 199.928 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 353.82 Mbit/s

95th percentile per-packet one-way delay: 198.481 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 320.45 Mbit/s

95th percentile per-packet one-way delay: 204.565 ms

Loss rate: 0.87%

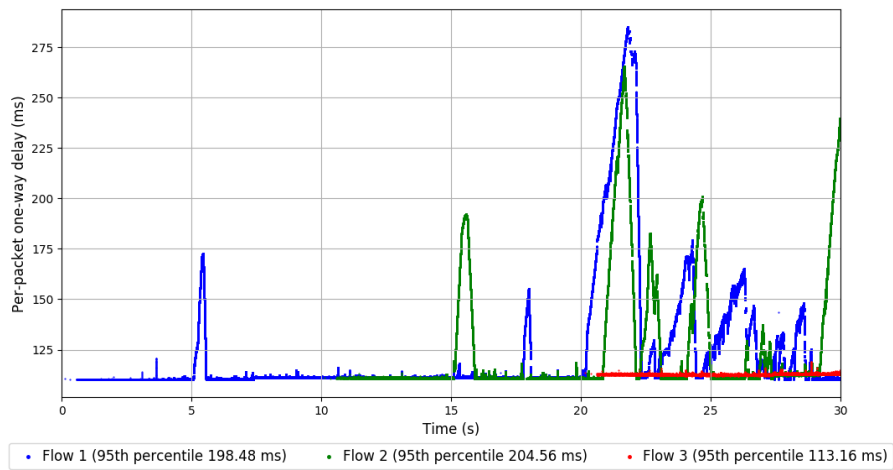
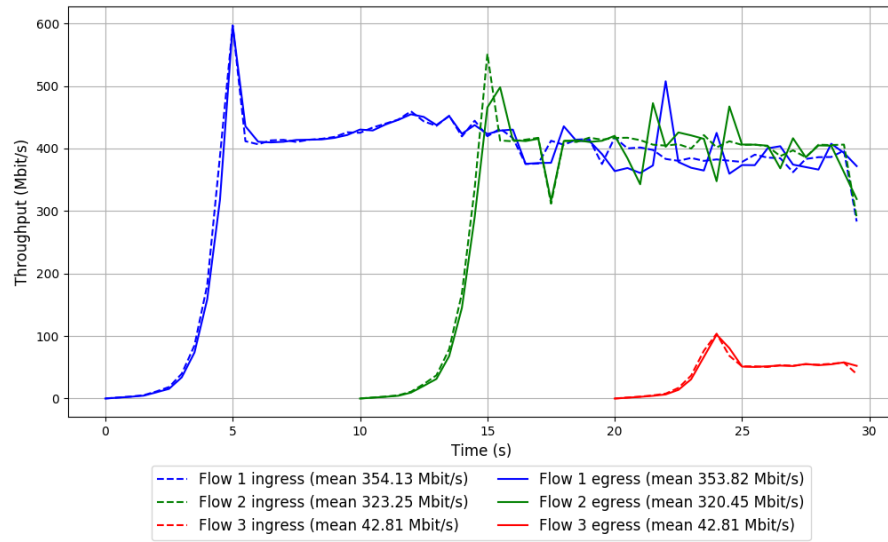
-- Flow 3:

Average throughput: 42.81 Mbit/s

95th percentile per-packet one-way delay: 113.163 ms

Loss rate: 0.01%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-28 13:48:33

End at: 2018-02-28 13:49:03

Below is generated by plot.py at 2018-02-28 19:40:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 566.54 Mbit/s

95th percentile per-packet one-way delay: 169.610 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 287.10 Mbit/s

95th percentile per-packet one-way delay: 116.128 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 302.09 Mbit/s

95th percentile per-packet one-way delay: 130.935 ms

Loss rate: 0.08%

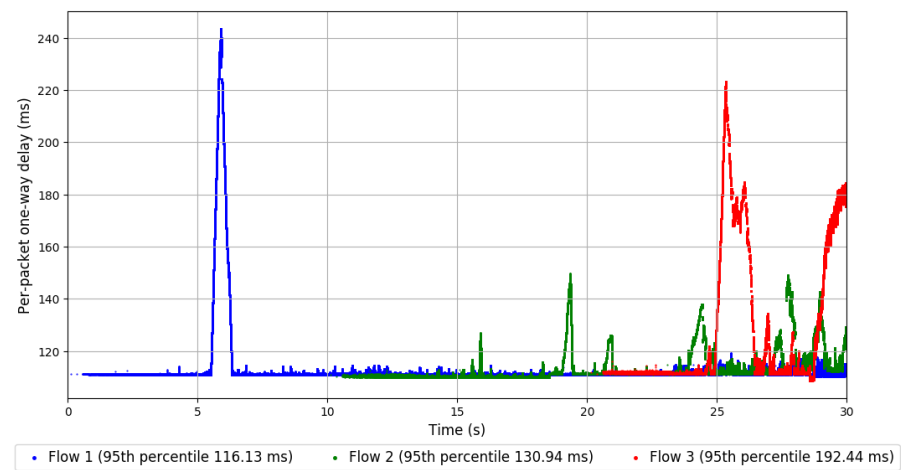
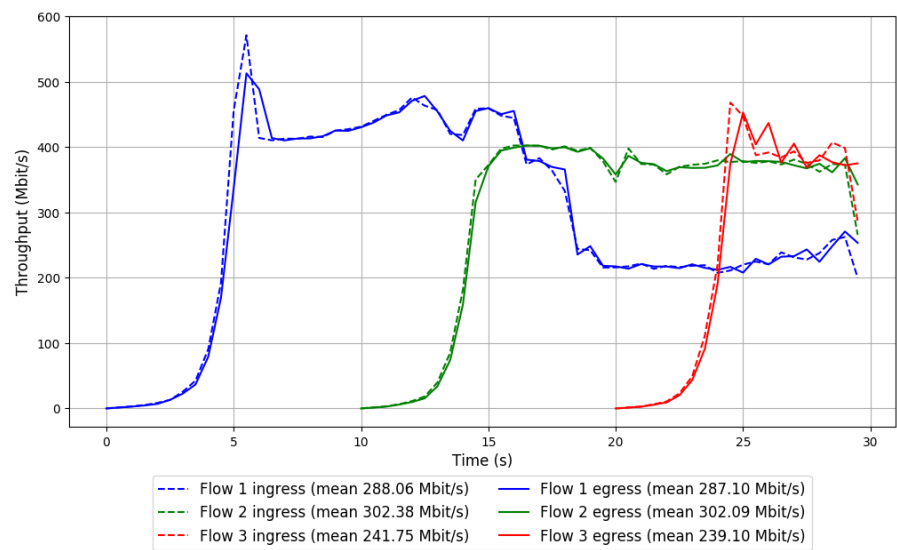
-- Flow 3:

Average throughput: 239.10 Mbit/s

95th percentile per-packet one-way delay: 192.441 ms

Loss rate: 1.08%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-28 14:08:25

End at: 2018-02-28 14:08:55

Below is generated by plot.py at 2018-02-28 19:40:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 542.19 Mbit/s

95th percentile per-packet one-way delay: 221.927 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 339.95 Mbit/s

95th percentile per-packet one-way delay: 253.316 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 188.00 Mbit/s

95th percentile per-packet one-way delay: 124.851 ms

Loss rate: 0.00%

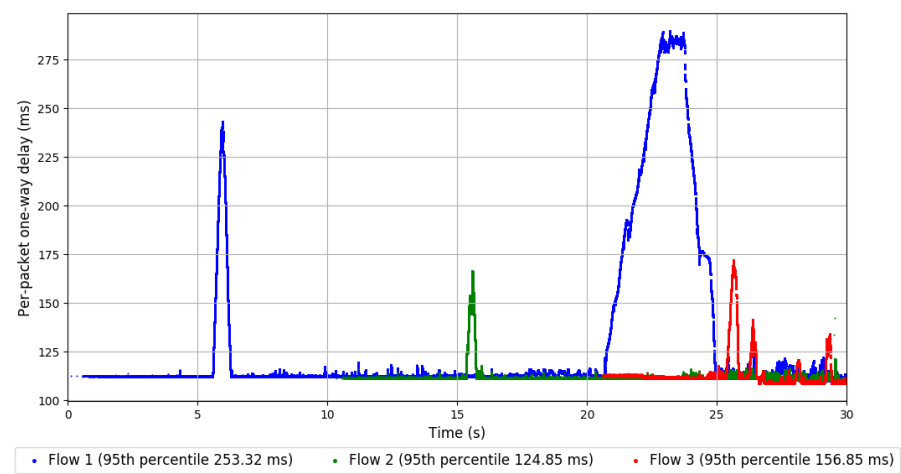
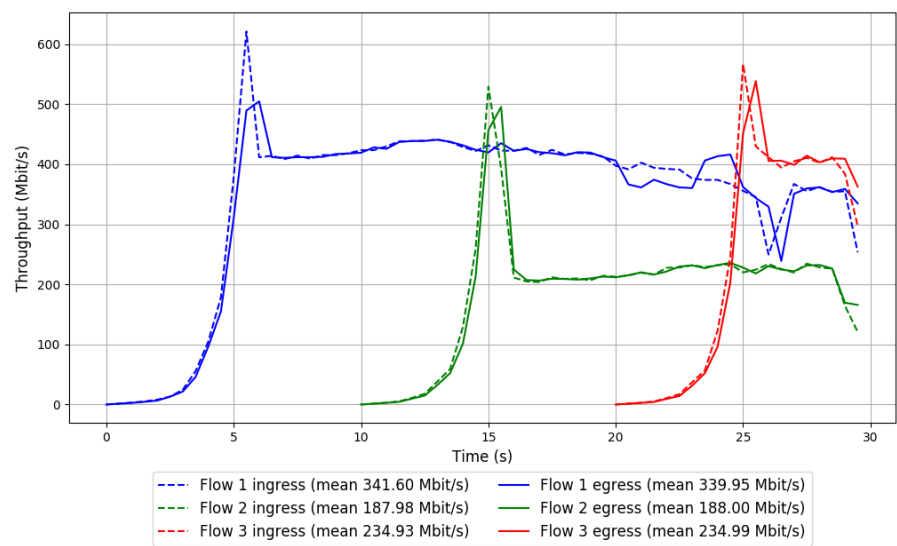
-- Flow 3:

Average throughput: 234.99 Mbit/s

95th percentile per-packet one-way delay: 156.848 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-28 14:28:14

End at: 2018-02-28 14:28:44

Below is generated by plot.py at 2018-02-28 19:41:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 580.12 Mbit/s

95th percentile per-packet one-way delay: 267.182 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 353.98 Mbit/s

95th percentile per-packet one-way delay: 231.679 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 265.43 Mbit/s

95th percentile per-packet one-way delay: 293.693 ms

Loss rate: 1.36%

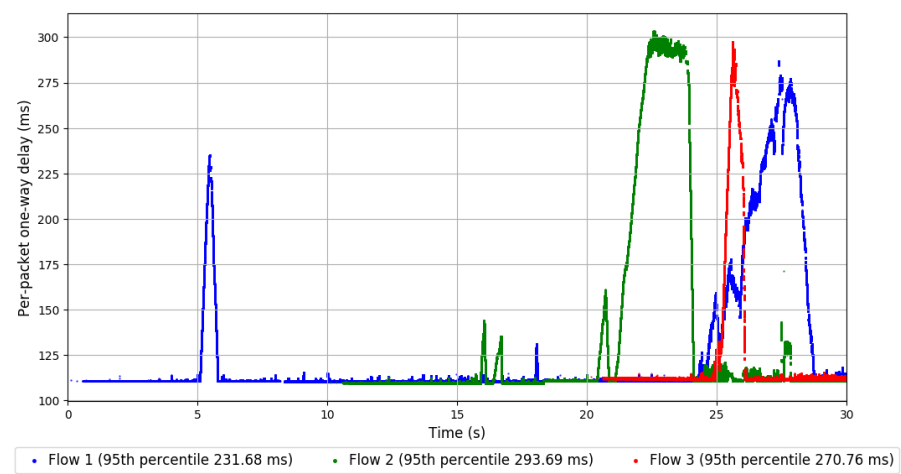
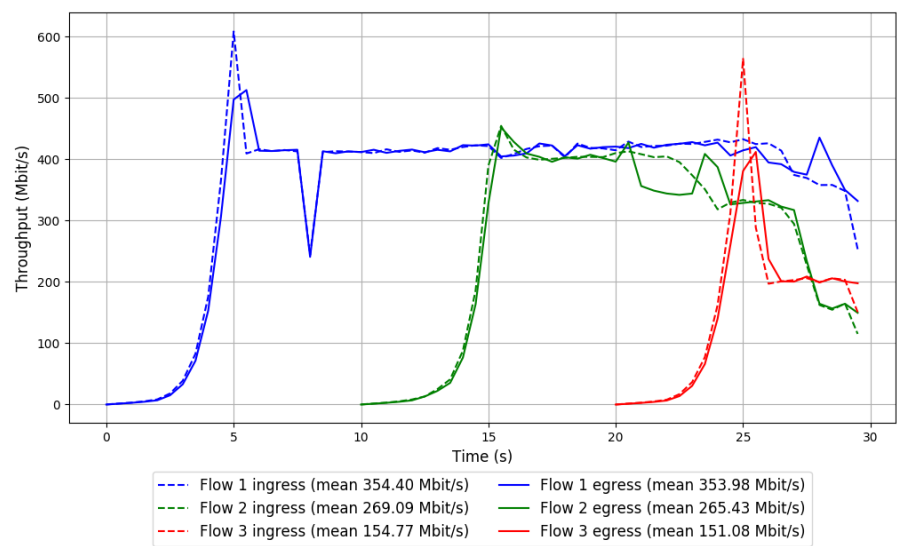
-- Flow 3:

Average throughput: 151.08 Mbit/s

95th percentile per-packet one-way delay: 270.764 ms

Loss rate: 2.40%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-28 14:48:09

End at: 2018-02-28 14:48:39

Below is generated by plot.py at 2018-02-28 19:42:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 609.05 Mbit/s

95th percentile per-packet one-way delay: 284.713 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 341.27 Mbit/s

95th percentile per-packet one-way delay: 257.767 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 286.98 Mbit/s

95th percentile per-packet one-way delay: 295.825 ms

Loss rate: 2.19%

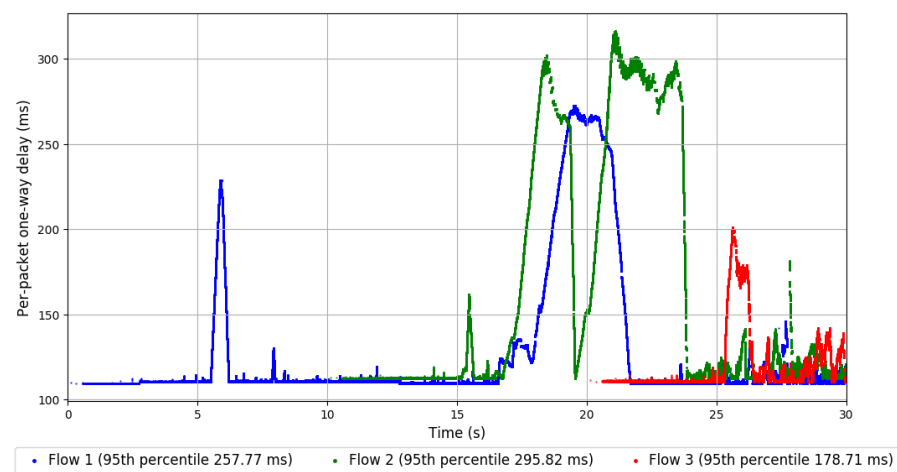
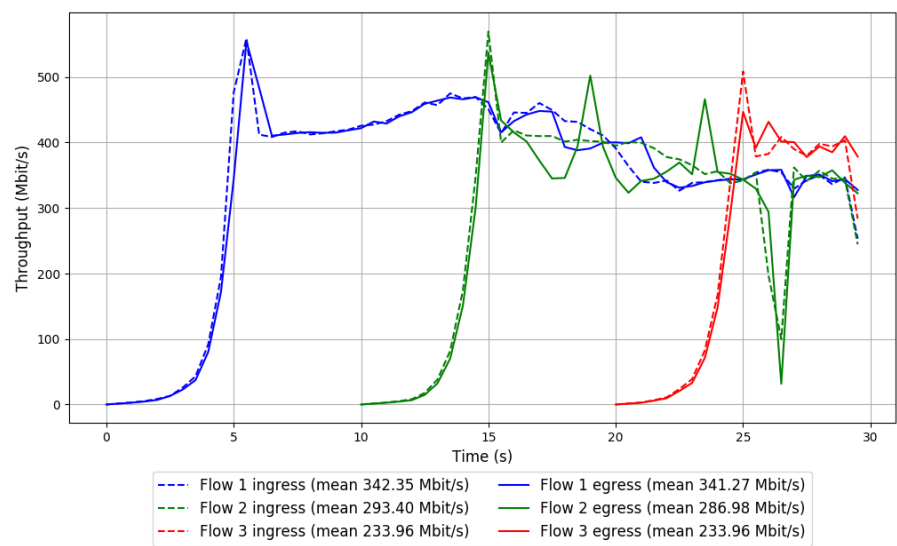
-- Flow 3:

Average throughput: 233.96 Mbit/s

95th percentile per-packet one-way delay: 178.711 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-28 15:08:13

End at: 2018-02-28 15:08:43

Below is generated by plot.py at 2018-02-28 19:42:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 618.82 Mbit/s

95th percentile per-packet one-way delay: 260.165 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 384.49 Mbit/s

95th percentile per-packet one-way delay: 210.531 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 300.71 Mbit/s

95th percentile per-packet one-way delay: 300.736 ms

Loss rate: 1.60%

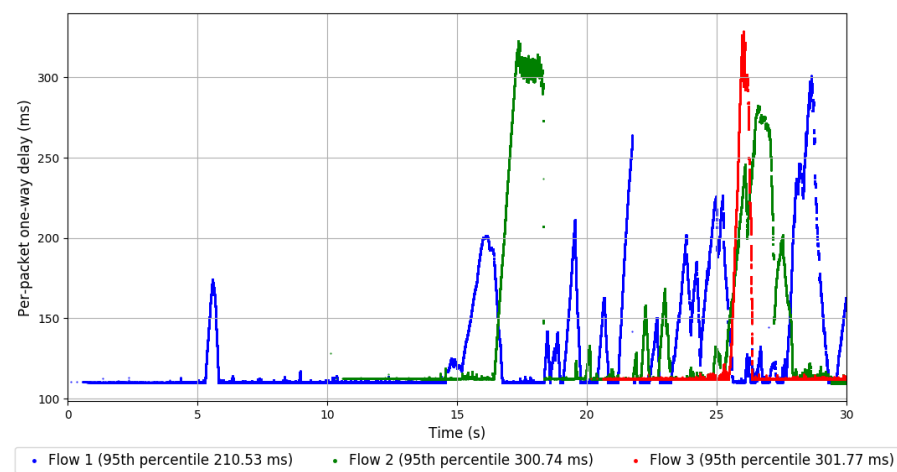
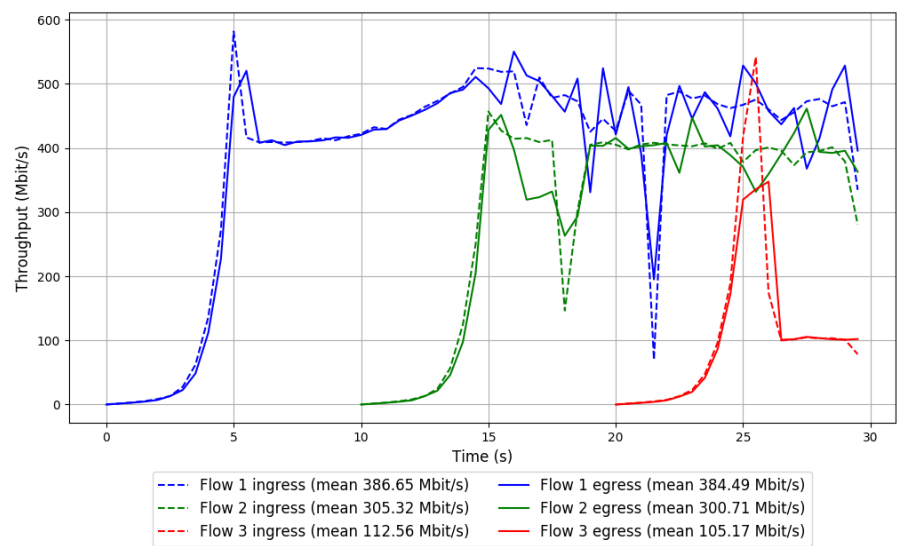
-- Flow 3:

Average throughput: 105.17 Mbit/s

95th percentile per-packet one-way delay: 301.768 ms

Loss rate: 6.57%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-28 15:28:26

End at: 2018-02-28 15:28:56

Below is generated by plot.py at 2018-02-28 19:42:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 590.79 Mbit/s

95th percentile per-packet one-way delay: 229.960 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 345.71 Mbit/s

95th percentile per-packet one-way delay: 253.499 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 303.78 Mbit/s

95th percentile per-packet one-way delay: 196.231 ms

Loss rate: 0.23%

-- Flow 3:

Average throughput: 131.35 Mbit/s

95th percentile per-packet one-way delay: 118.530 ms

Loss rate: 0.01%

Run 10: Report of Vivace-LTE — Data Link

